

J.B.E.W. Salutes the

INTERNATIONAL UNION OF OPERATING ENGINEERS



WM. E. MALONEY

General President



F. A. FITZGERALD

General Secretary-Treasurer

OR more than half a century the International Union of Operating Engineers has been an effective force in the building of America. Its members—skilled men performing rugged jobs—can look with pride toward their contribution in the development of the nation's industrial might. Organized in 1896 with the avowed purpose "to rescue our craft from the low level to which it has fallen," the I.U.O.E. has kept faith with its founders and performed its mission. Today, the membership numbers more than 150,000 highly-trained craftsmen and ardent unionists.

President of this vigorous organization of technicians is William E. Maloney, an able and forward-looking labor leader. F. A. Fitzgerald is the capable secretary-treasurer of the I.U.O.E., which has its headquarters in Washingington, D. C. The Journal is proud indeed to salute the Engineers this month and wish them continued success.

The ELECTRICAL WORKERS Journal

OFFICIAL PUBLICATION OF THE INTERNATIONAL BROTHERHOOD

Volume 49, No. 9

September, 1950

EXECUTIVE OFFICERS

D. W. TRACY International President 1200 15th St., N. W. Washington 5, D. C.

OF ELECTRICAL WORKERS*

J. SCOTT MILNE International Secretary 1200 15th St., N. W. Washington 5, D. C.

W. A. HOGAN International Treasurer 647 South Sixth Ave., Mt. Vernon, N. Y.

Vice Presidents				
First DistrictJOHN RAYMOND 204 Rose Bldg., 744 Ouelette Ave., Windsor, Ont., Canada				
Second DistrictJohn J. Regan Room 239, Park Square Bldg., Boston 16, Mass.				
Third DistrictJoseph W. Liggett 32 Eagle St., Albany 1, N. Y.				
Fourth District				
Fifth District				
Sixth District				
Seventh District				
Eighth District				
Ninth District				
Tenth District				
Eleventh DistrictFRANK W. JACOBS 4249 Gibson Ave., St. Louis 10, Mo.				
Twelfth District				
International Executive Council				
CHARLES M. PAULSEN, Chairman The Admiral, 909 W. Foster Ave., Apt. 703 Chicago 40, Ill.				
First DistrictLouis P. Marciants 119 Morningside Drive, Trenton 8, N. J.				
Second District				
Third DistrictOLIVER MYERS 912 Adams St., Toledo 2, Ohio				
Fourth District				
Fifth District				
Sixth District				
Seventh District				
Eighth District				

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* AFFILIATED WITH THE AMERICAN FEDERATION OF LABOR

POSTMASTERS: Change of address cards on Form 3578 should be sent to International Brotherhood of Electrical Workers, 1200 Fifteenth Street, N. W., Washington 5, D. C. Published monthly and entered as second-class matter at the post office at Washington, D. C.—Accepted for mailing at special rates of postage as provided for in Section 1103, Act of October 3, 1917, authorized March 28, 1922. Subscription price: United States and Canada, \$2 per year, in advance. Printed in U.S.A. This Journal, will not be held responsible for views expressed by correspondents. The first of each month is closing date. All copy must be in our hands on or before this time. Paid advertising not accepted.



1200 Fifteenth Street, N. W.

Washington 5, D. C.

About Philitary Cards Service Lands
July 26, 1950

TO ALL LOCAL UNIONS

Dear Sirs and Brothers:

We have received requests for information about active military service cards for members entering the armed forces.

The active military service provisions were removed from our Constitution by the 1948 Atlantic City Convention. Because of this, we deeply regret that this office cannot at this time assist members in the armed services in maintaining their standings. We are bound by the Constitution and it can only be changed by referendum or at the coming October Convention in Miami, Florida.

Your International Officers, including members of the Executive Council, recognize the early need of aiding our members in the service. Unless there is an early change in the military situation, we will urge that the Constitution be amended at our coming Convention.

However, until the Constitution is amended, it will be necessary for the member to pay his dues or for the Local Union to pay his per capita tax to protect his standing.

Regretting that we cannot give you a different answer at this time and with best wishes, we are

Sincerely yours,

J. Scott Milne

International Secretary

D. W. Tracy International President

FORM 200-M

50 LONG YEARS AGO

IT'S a fascinating process delving back into archives and learning about those first members of our Brotherhood, the ones who founded it, who sacrificed for it, who gave it the firm foundation that has enabled it to live and grow to the strong virile organization it is today.

We have in our Archives Collection here in the International Office, some of the first Journals ever published by our Brotherhood. Volume 1 was issued in January of 1893 and it was entitled The Electrical Worker, official organ of the National Brotherhood of Electrical Workers of America.

We thought our members would like to have an article in the Journal from time to time, composed of excerpts from these first Journals and others through the years, for due to the generosity of Local Union 1 in St. Louis and others of our locals, we have nearly a complete set of our official publication. We would like our members to come to know those Brothers of another day, know their zeal for the Brotherhood, know how they thought and felt about things, trace the progress of electricity and unionism through the decades.

Here is an editorial from the very first Journal. J. T. Kelly was Secretary-Treasurer and editor of the Journal then and he traces in his first editorial the reason for the birth of the Brotherhood.

Editorial

"The Chronicle of Time had almost closed his volume on the Nineteenth Century — a century which will go down the ages as the transition period from the ancient to the modern, from the old order of things to the new. He had recorded in glowing colors the discoveries and progress of this age—how a struggling infant had grown to be a giant and given its name to the century—the age of electricity. But, ere he finishes the

last chapter, let him pause to chroniele the birth of another infant, which like its prototype, is destined to be an important factor in the moral, social and intellectual progress of the world—the National Brotherhood of Electrical Workers of America.

"Let us see what apology it can offer for its existence.

"While the electrical industry is new—the oldest branch so young that the president of the largest electrical company in the world was a grown man, a country doctor riding around on a pair of pillbags before there was a telegraph line in existence; the telephone and electric lights were searcely mentioned in the school books of the youngest of our members, and the electric railroads and the application of power are things of yesterday; yet from a humble beginning it has grown to such proportion that today there are probably more



Others' discount of the National Brecherhood Electrical Workers of America.

701. 1.

P. LOUIS, PANUARY, 1998.

No.



Electrical Worker Vol. 1, No. 1 featured men who organized Brotherhood.

persons employed in it than any other industry except steam transportation.

"With the introduction of this new and subtile force-harmless when handled properly, but more terrible than the thunderbolts of Jove in the hands of unskilled men -one would naturally suppose that the men who have to deal with it would be well paid for their work. But alas, the men who have carried the telegraph lines from ocean to ocean, who wove the web of telephone wires in every city and town, who erected the light that transforms night into day, who constructed the machines and instruments by which this has been accomplished, who risk their lives daily that the community may have light, news, easy communication and protection, have been reduced year by year from their rightful position among skilled mechanies, until today, both in wages and social standing they are lower than any other trade requiring no greater amount of skill or manual effort, while the trade is overrun with unskilled men, and in consequence the danger to life and public safety is constantly increasing.

"Only a few men in different cities seemed to realize where we were drifting to and set to work with a determination almost born of despair to stop the tide and place themselves and fellow-workers in that material, moral and social position the dignity of their trade entitled them to. A few local unions were started, the armature revolved and the others saw the light until a dozen or more locals were organized. But it was soon evident that there should be one grand circuit from which each local could draw new life and energy and thus establish a common bond of brotherhood among all electrical workers, and as a result the wireman, the lineman, the inspector, the armature-winder and others met in convention and thus

was born the National Brother-hood of Electrical Workers."

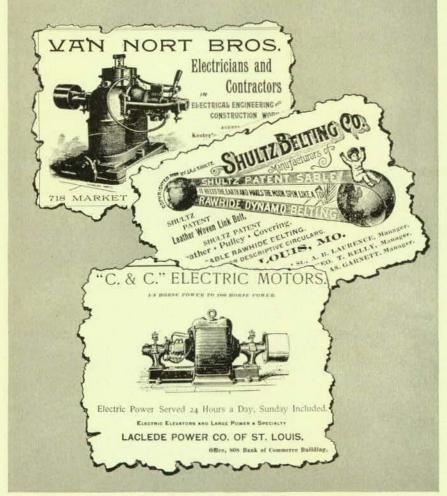
Also from our very first Journal —January 1893, came this interesting bit of electrical news:

"Dancer Enveloped With Electricity

"It has remained for an Englishman, and one from the provinces at that, to outdo either Paris or New York in the electric-dance business. He brought out in London less than a fortnight ago, a most wonderful contrivance. A girl, and a very pretty one, ran upon the stage dressed in a costume somewhat like that worn in the serpentine dance, and about her dress and among the folds of her skirts flashed sparks and lights of all colors. She danced and kicked, twisted and turned, while the lights continued to flash. Revolving wheels, fountains and prisms of light played about her, appearing and disappearing, and changing with every smile and step. Imagine a handsome woman dancing in a rainbow while it turns about her, casting its different colors alternately upon her face and figure and vivid flashes like miniature lightning playing about

"The way the thing is done is no secret, though its technical explanation requires some little knowledge of electricity on the part of the reader. The young woman had fastened to her dress vacuum tubes, which are glass tubes from which the air has been exhausted. These are led by an induction coil giving a long spark, which when discharged through the vacuums, give out the intense and varying lights at will. The tubes were made in various forms and the dancer wore an India rubber dress to protect her from the discharge."

Way back in those days, unionists were having a tough time getting a break in the daily press. In the second issue of the *Journal*, J. T. Kelly wrote an editorial commenting on the birth of the *Journal* and the comments and "lack of comments" on it.



Advertisements in early issues.

"Are due to the daily press of St. Louis for the very handsome manner in which they welcomed us to the journalistic ranks. Each and every one of them gave us a kindly greeting and had a few words of encouragement. Their action was a great contrast to the sullen silence which was universally observed by the electrical papers, to each and all of whom we mailed a sample copy. They did not even notice our advent among them. They may have considered it beneath their collegiate dignity to grasp the digits of a hornyhanded son of toil, or more probably their masters, the great monopolizing electric companies (by whom they are subsidized or owned, body and soul) forbade them to give a kindly greeting. This will not interfere with our digestion, however, nor will it sour the lacteal fluid of human kindness in our disposition. In their despite we will wax and grow fat and in our March issue will discard our swaddling and long clothes and appear in a neat, quiet gray quakerish covering befitting our modest demeanor and expectations. We refer our classic friends to Byron's farewell to Moore and as their memories are probably as short as their bank accounts we quote these lines for their benefit:

"Here's a sigh for those that love me,

Here's a *smile* for those that hate;

And whatever sky's above me, Here's a heart for every fate.''

Evidently Editor Kelly had his "New Electrical Products" section or its equivalent way back then. Here are a couple of interesting notes from the February 1893 issue:

Playing the Banjo by Electricity

"Those who hold that the introduction of electricity into every department of industrial and social life is apt to be overdone, would seem to have some ground for complaint now that an electric banjo has appeared in Boston. The instrument has electro-magnets so fitted as to press on the frets when LOCAL UNION NO. 9, CHICAGO

Special Correspondence, Jun. 16

Construction work is almost all a standard in this view and the construction work is almost all a standard in the very second correspondence, Jun. 16

Construction work is almost all a standard in this view after a construction work in almost all a standard in the very second correspondence, Jun. 16

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There will be over 100, 000 incandonous lights in the bushings.

The Correspondence, Jun. 16

The Correspondence of wearing all of the construction work in this stige.

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The Edman Company has been rising a bight least some in the construction work in this city and provided the construction work in this city and provided the construction work in this city, and the construction work in this city and the construction of the co

This is how news from locals was used.

energized, and a plucking arrangement acts on the strings. These actions are controlled by a moving strip of paper run by an electric motor, through guideways of a contact-maker, the paper being previously stamped out in dots and dashes corresponding to the tune. It may be doubted, however, whether the electric banjo will ever serve any practical purpose beyond being a monument of perverted ingenuity."

Painting by Machinery

"Nearly all the trades have had to contend with labor-saving machinery. The eigarmakers and the printers have had to grapple with the question, and now comes the painter's turn. A painting device or machine has been used, it is claimed, with great success on the World's Fair buildings. It consists of a small air compresser operated by an electric motor. Twelve parts of air to one of liquid paint are drawn into the machine and discharged at a pressure of about 12 pounds in a steady stream. The paint is put on with

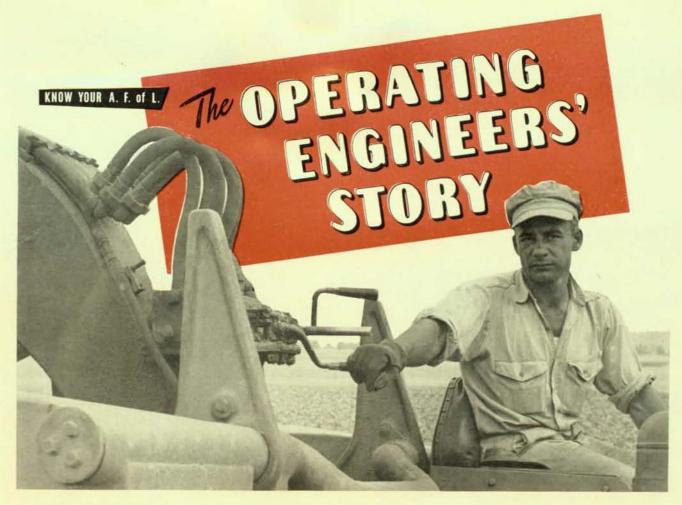
a hose and is spread much more evenly and economically than could possibly be done by hand. The machine will do the work of several men."

The International President often sent a message to the Brotherhood through the pages of the official Journal even as today. This appeared in the February 1893 issue:

Advice From our Grand President, Henry Miller

"The electrical companies and works are just beginning to appreciate the Brotherhood. The fact that the electrical workers have to serve an apprenticeship of three years is a guarantee that a member of the organization is a skilled and intelligent workman — one that uses his head as well as his hands. The members are more apt to teach each other all the points and tricks of the trade and will learn quicker from each other than from strangers who are afraid the

(Continued on page 34)



MIRACLE of engineering! That's the term applied to our modern American world where skyscrapers loom high above the city streets, broad, paved roads run like so many arteries from the pulsing hearts of our towns big and small, rounding curves and tunnelling through ranges of solid rock, tremendous mountains of concrete dam mighty rivers creating power to light the homes and run the factories for millions of our citizens, strong bridges rise high above our waters and remarkable tubes run under them, through the river beds, enabling man to travel freely over land, over water or under it.

Yes, we live in a world of miraele construction brought into being by corps of architects and civil enginers and manufacturers (of steel and briek and concrete and all the other products necessary to create our miracle projects) and workmen in every branch of the construction industry. All play an integral part in the building of a modern world, But there is one group of workers that is in the game from the beginning. They level the land where the mighty structures are to rise. They clear the way for roads through mountain and forest—the crooked ways are made straight. Before buildings can be erected the foundations must be dug and fortified. This is the work of the Operating Engineers and this is their story.

What They Do

Operating engineers are workers skilled in the maintenance and operation of power construction equipment ranging all the way from air compressors to steam shovels.

Let us consider the important part the operating engineer plays in road construction. Operating engineers run with skill and precision the huge draglines, the cranes with big scoop-bucket attachments that swallow in the dirt and carve a path for the road to take. The operating engineer handles the huge,

unweildy crane and all its attachments as easily as a little boy runs the derrick he makes with his Christmas Erector set, because he has served his apprenticeship and learned every detail in the care and operation of the complex piece of machinery. The crane may have the dragline for scooping dirt, or the "clam-shell" attachment for gathering dirt and debris, a shovel, or a hook, lifting girders high in the air-the operator manages all with the ease that comes from practice and experience. He competently executes preliminary excavation work with the "carryall-scoop" the common name the operating engineer gives to his excavating machine. This is drawn by tractor. It has increased its capacity through the years from about 12 yards to its present capacity of 40 yards.

Once the road excavations have been made, the operating engineers take out the big bulldozers which level and pack the road beds. Others run the grading machines. These operations played a most important part in the building of so many airstrips during World War II and play an important role every day in the construction of the landing fields demanded by an air-minded traveling public.

The paving mixers, the large type concrete mixers, which mix and distribute the concrete over the road bed, are also tools of the operating engineers. These mixers have dual drums constantly churning which give an almost continuous flow. The finishing machines level and give a finish to the roadbed. These again, are operated by members of the I.U.O.E.

Thus road construction from start to finish is highly dependent on the skill and know-how of the trained operating engineer.

A Great Triumvirate

The United States, which boasts the best highways in the world owes them to the planners who conceive them, the researchists who develop the formulas for paving them, and these skilled workmen who carry out the plans and execute the formulas.

And wherever railroads traverse this country, operating engineers played a major part in getting them through,

There is hardly need to explain in detail the work of the operating engineer in building construction. There is so much of the sidewalk superintendent in every one of us that we are all pretty familiar with the workmen and their big, powerful shovels, making a yawning crater in the earth before any foundation can be laid. Next come the pile drivers, forcing the heavy piles deep into the earth with great power-driven hammers, to give additional support to the earth on which the office building or store or apartment house is to rise. And then when the foundations are laid and the building begins to go up. the operating engineers play still another important part in its erection. By hod hoist or eage hoist (similar to elevator built temporarily on the outside of the building) all types of building material are hoisted to the spot needed in

the construction process. In some cases a permanent elevator shaft is used.

The operating engineer's work is not confined solely to land, however, they are active in dock building and excavating in river beds—they played a most important part in the building of the Holland Tube and in the more-recently executed Brooklyn Tunnel. Canals are their forte too. Back in 1912 when the "big ditch" that was the Panama Canal was constructed, there were the operating engineers, first tunnelling, dredging, and then helping to build the mammoth walls of concrete for the dams and locks.

Dipper Dredge

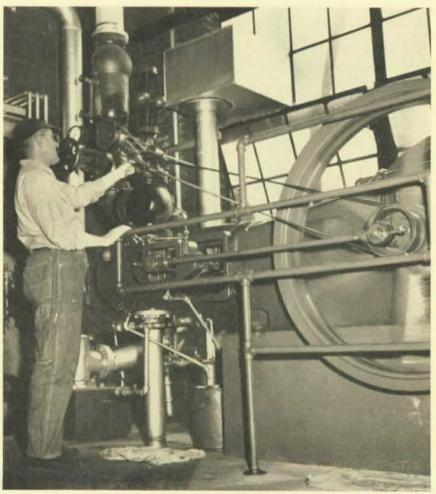
For the waterfront work, cranes and shovels are mounted on barges. The dipper dredge, operated by members of the I.U.O.E. is a familiar sight along any waterfront in the U.S.A.

There are many other ways in

which the operating engineers serve the citizens of our country. They mix and pour the tons of concrete for the mammoth dams like Boulder and Grand Coulee and all the lesser ones. Not the least of their work is the clearing of snow-bound roads in winter. During the terrible blizzard which befell the western range states in 1949, hundreds of members of the International Union of Operating Engineers were on the job opening the roads. Here's a comment on the work of the engineers during "Operation Snowbound":

Snow Operation

"Since Saturday morning, January 29, and until March 4, the headquarters office in charge of snow-relief operations in this area announced 102,395 miles of roads have been opened, the machines sometimes breaking through drifts 20 to 30 feet deep, in the disaster area of the four states, Wyoming,



Stationary engineers keep tab on machinery in steam plants.



Nebraska, North and South Dakota. By breaking open these roads, the operating engineers were able to liberate 202,623 persons on snowbound farms and ranches and to provide them with access to trading centers to replenish their many diminishing supplies.

"Scores of sick persons were evacuated, with bulldozers making way for the ambulances to get through.

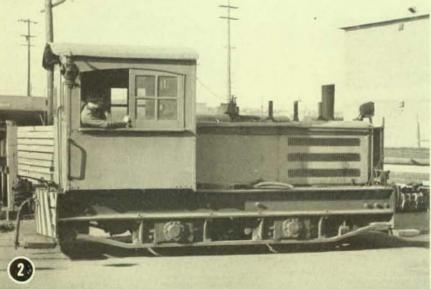
"The total of cattle liberated in the four states reached a figure of 4,019,161. Many 'dozers made trails to haystacks so that the cattle could obtain feed."

Yes, this work of the operating engineers is vital and it affects the lives of all of us. It is changing work. New machinery is invented every week it seems and the engineer is ever learning and keeping up with his trade. The International Office of the LU.O.E. has a good working arrangement with many of the manufacturers of heavy equipment. As new machinery is placed on the market, the I.U.O.E. members go right into the factory and learn its operation and maintenance at the source. New men are constantly being trained on the job to operate the various machines. The I.U.O.E. has set its period of apprenticeship at three years. During that time the apprentice or junior engineer as he is sometimes referred to, works with an experienced operator, oils and greases the construction machinery and is gradually instructed in the care and operation of increasingly complex machines.

So much for a brief description of the operating engineer and his work.

Other important members of the

- 1. Engineer operating a crane which is employing a clam shell bucket.
- 2. Diesel-operated yard engine operated by the members of I.U.O.E.
- 3. This modern grader is designed for maintenance and construction.





International Union of Operating Engineers are the stationary engineers - those who operate and maintain stationary engines and mechanical equipment. It is stationary engineers who run and keep in good order the heating systems in apartments, office buildings, theaters, factories-all over these United States. They are responsible for the maintenance and repair of valuable equipment such as steam boilers and boiler-feed pumps, ventilating and refrigerating equipment, and see that it operates at maximum efficiency at all times. Apprentices in this branch normally serve a four-year apprenticeship term.

All over our country the operating engineers are recognized as the skilled workmen they are. Their scale of wages is comparable to the intelligence and mechanical ability required in their trade. It was not always thus. As was the case with so many of our skilled workmen, it took a strong union to bring them

4. A stationary engineer checks the gauges indicating boiler pressures.

5. "Sheep-foot roller" gets the name from its earth-grabbing projections.

6. Big earth-moving equipment such as this is specialty of engineers,

advancement and recognition. This account brings you the story also of the union and its struggle marked by strife, oppression and finally crowned with victory.

Before the advent of the union it was common practice for an engineer to work 12 to 14 hours a day for a wage of \$7 to \$10 a week and that week comprised a full seven days. Any engineer who received \$12 was considered exceptionally well paid.

The last years of the 19th century were rough ones for the working people as we of the Electrical Workers know, for our union was born in that period too. Lockouts, blacklists, legal prosecution, added









to depression and unemployment of the time put a crushing weight on labor. It was common practice for union membership to be grounds for discharge of employes. The A.F. of L. had come into being and Samuel Gompers had been elected president, but the loss of the Homestead strike and others had dealt it a pretty severe blow.

Organization Day

It was not a very auspicious time for the formation of a new union, but like other workers of the day, the engineers knew that alone they could do nothing. They banded together, determined "to rescue our craft from the low level to which it has fallen." Eleven men assembled in Chicago on December 7, 1896 and drafted the first constitution for their organization which was known in those days as the "National Union of Steam Engineers of America." They set forth the purposes of their organization - broad and noble aspirations characteristic of a true brotherhood:

"We propose to encourage a higher standard of skill among our members, to cultivate feelings of friendship among the men of our

- 7. A 40-ton Washington Whirly with 100-foot boom performing heavy work.
- 8. Bulldozer with wench drums on back clears way for construction work.
- 9. New "pony ditcher" digs ditches as narrow as six feet for pipes, cables.

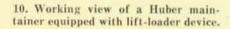




Page Ten

The Electrical Workers'





- 11. Steam shovel is the rugged workhorse of all our big building projects.
- 12. Big steam rollers keep our roads smooth. I.U.O.E. members on machine.
- 13. Massive drag-line excavates a cut for construction of irrigation canal.

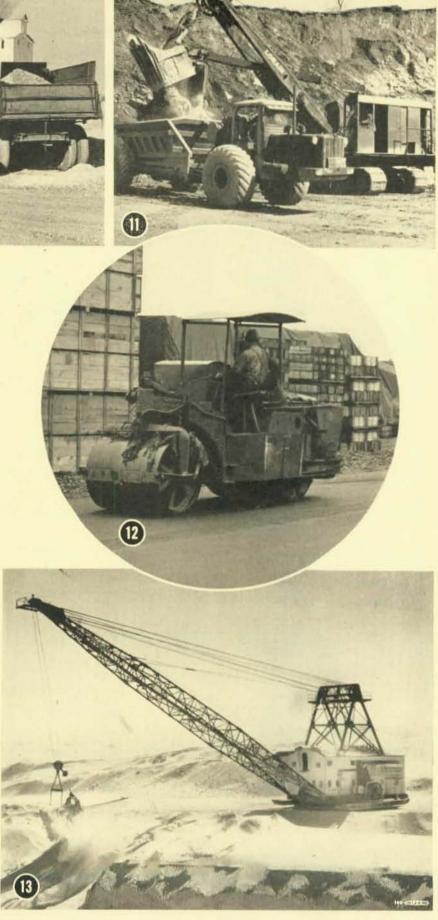
eraft, to assist each other in securing employment, to reduce hours of labor, to secure a higher standard of wages for work performed by legal and proper means, to elevate the moral, intellectual and social conditions of our members, and do our utmost to extend a uniform license law nationally."

Locals Added

Local unions immediately sprang up in many states—Massachusetts, New York, Ohio, Illinois, Kansas, Missiouri, Michigan and Colorado.

On May 7, 1897, a charter was granted the new union by the A.F. of L. and the engineers took their equal place among the most powerful trade unions in America. Toward the end of 1897, this union had progressed to a point that it was necessary to change the name of the union to International and admit Canadian local unions.

By the year 1902, there were 123 active unions with a membership of more than 15,000. As was the case with all our unions in those days, their early history was marked by hardships and the constant fight to keep the footing gained and acquire the additional



gains all organized labor was fighting for, such as the eight-hour day. The early history of the operating engineers was also marked by severe jurisdictional disputes.

Through the years just previous to World War I, the operating engineers defended the general labor movement, but they were also attempting to advance their own interests, particularly by the establishment of uniform regulations for engineers and effective licensing.

The union was making gains everywhere and was playing its part in the building of the America we know today. Nineteen-twelve saw hundreds of the operating engineers at work on the Panama Canal. Skyserapers like the Wool-



14. A "stiff leg" crane lifts huge concrete pipe from low-bed trailer truck.

15. Huge crane, mounted on barge, is used for bridge building and dredging.

worth Building were rising in New York and other eities and operating engineers worked on their excavation, superstructure and later were assigned jobs in the permanent plants.

In 1913, Boston's Local 16 secured a contract for stationary engineers in breweries, which was described as a "model" agreement and which was to be a pattern for drives in other cities. The contract provided \$35 weekly for chief engineers and \$28 for others; the eight-hour day, six-day week and arbitration of grievances.

Keeping Pace

In the meanwhile new machinery was being built and the union was keeping its engineers in pace with the times by seeing that they received instruction concerning it. As early as 1913, study of mechanical refrigeration began, when it was predicted that within 25 years ice would be practically abandoned as a means of refrigeration.

In 1914, the union instituted its first death benefits for members.

The year 1915 was an important



Page Twelve



16. This small clam shell shovel is operated by a compressed air system.

17. A row of "whirleys" are shown in action at a busy West Coast shipyard.

one for the union. It was marked by many inventions valuable to their trade, patented by union engineers. But the most important event of the year from the engineers' standpoint was the great Panama Pacific International Exposition in San Francisco, held in celebration of the completion of the Panama Canal. Not only had members of the union worked on construction of the Panama Canal. but they had taken a prominent part in the erection of the Exposition, which was the first ever built entirely with union labor.

World War Days

When World War I broke out, the operating engineers demonstrated their patriotism and loyalty as did all American labor. Following the war the engineers joined with all organized labor to combat the vicious attacks of the antiunion forces.

The year 1920 witnessed the beginning of the great Federal projects which have become monuments to the skill of American engineering. Among the first were the Wilson Dam at Florence, Alabama and the Chippewa Canal in Ontario, Canada, which enabled ships to sail around Niagara Falls.

In 1922, conditions in the country for labor reached a low ebb. The Eighth Biennial Convention of the International Union of Steam and Operating Engineers in Minneapolis in September 1922, revealed more members on strike than at any time in the union's history. The defense fund was exhausted, with the International owing locals from \$2000 in strike benefits. The Hoisting and Portable members were the first to receive the attack of the employers, and practically that whole section of the organization was either out on strike or locked-out at the same time. The national plot of the em-



18)

as a result there was a marked increase in membership.

By the year 1926, the thirtieth year in the history of the organization, outstanding gains were reported. Membership stood at 40,000 and assets in property and money in all funds totaled over \$200,000. With the gain in membership came attendant gains in better conditions for members, more agreements entered into between locals and employers than ever before, each agreement bringing more wages for the engineer, shorter hours and improved working con-

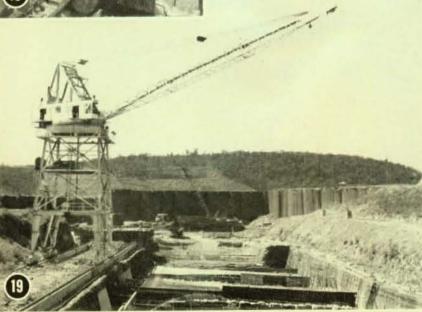
ditions. In addition it was becoming common practice to include vacations with pay in agreements for stationary engineers.

Further progress for the International Union came in April 1927 when the Brotherhood of Steam Shovel Operators and Dredgmen amalgamated with it—thus eliminating a chronic state of irritation that had existed between the two unions, and opening the way for the greater advancement of both.

On July 1, 1928, the official name of the International Union became "The International Union of Operating Engineers" with the climination of "steam" from the title.

In 1930 came the depression, and unemployment became the major problem of engineers as it did for all working people.

Conditions in general began to look better in 1933 and President Roosevelt's extensive Public Works Program was an encouraging outlook to the I.U.O.E. since a great many of its members found em-



18. Hoisting engineer does his work with aid of rolls of heavy steel cable.

19. Whirleys such as this do the heavy work on big dam construction projects.

20. An engineer-operated caterpillar crane lowers steel pipe into a trench.

ployers struck the building trades first and whole local unions of engineers were out. Not only was this true of the Hoisting and Portable locals but other industries where Stationary Engineers were employed were also affected.

The International officers of the International Union of Steam and Operating Enginers took a firm stand, however, and encouraged all unions to fight against the lowering of conditions. Their courageous action all over the country won admiration in many quarters and



Page Fourteen

The Electrical Workers'

ployment on these projects. The great Tennessee Valley Authority was one of the mammoth public power projects on which the operating engineers played a major role.

Attack Repulsed

Toward the end of the 30's an attack from a different quarter was launched against the union. It came from the National Society of Professional Engineers which, by introducing legislation in various states, attempted to prohibit the I.U.O.E. from using the word "engineer" to identify their trade. The insidious attack was quickly met and defeated, however, in every state capitol where such legislation was introduced.

The operating engineers continued to work on many of the vast projects started during the '30's. As on all past expositions, the engineers had a large part in the building of New York City's 1939 "World of Tomorrow."

World War II

When World War II broke out, there was terrific demand for the skilled work of the operating engineers. Thousands saw service in the Seabee battalions overseas and those left at home played an important part in the speedy erection of camps all over our country. These camps had to be carved out of the raw earth with such handicaps as quicksand, swampland, hard shale and other surface difficulties to contend with.

The massive bulldozers which ripped up the soil, the huge graders which scraped the roadways, the derricks which swung heavy materials and equipment into place, the steam shovels which did the work of a hundred men in moving earth, the mechanical ditch diggers which turned out ditches by the thousands were all manned by operating engineers. Speed was essential and the operating engineers were the boys who could do the job with dispatch.

When the war ended, there was a big job ahead for the operating engineers in the construction boom which followed.

The union stands today more

than 150,000 strong and has locals in practically every large center in the United States. It has agreements with many contractors who often send out a call for, say 100 men. The LU.O.E. supplies them and has members willing to travel anywhere in the United States on a road-building job or other project.

150,000 Strong

The union is ever striving to improve the status and skills of its members. It has set up schools for apprentices in many large cities. It has been successful in negotiating pension plans for individual local unions with a number of contractors. It has been conducting an extensive safety campaign which has cut down the accident rate considerably. It issues a splendid journal, entitled, "The Interna-tional Engineer," in which, by running many technical articles with good diagrams and illustration, it keeps its members abreast of the changes in new machinery.

The International Union of Operating Engineers is a progressive forward-looking organization. Its members take pride in their work and in their union. We had opportunity to talk with an experienced man operating a steam shovel on a nearby project recently. We think his remarks are typical of the feeling of the members of this Brotherhood,

"I like my work," he said. "I

Victory in Scranton

International Representative Oscar Johnson has sent us the following information concerning the recent N.L.R.B. election held in Scranton, Pennsylvania, when our newly chartered Local 1520 won the election at the Scranton Electric Company.

The returns were as follows:

521—eligible to vote

275-I.B.E.W.

213-Independent

1-Neither

2-Void

492—Total votes cast

It is interesting to note that the U.W.U.-CIO was active in the campaign up until a few weeks before the election and then withdrew.

This election has made many employes happy and brings back memories to some of the old-timers,

During World War I, another I.B.E.W. local, L.U. 81, represented the electrical workers at Scranton Electric. However a strike in 1921 wrecked the local and it is only in recent months that the I.B.E.W. has reappeared at this company, in L.U. 1520.

like to feel that I'm helping to build something. In this world where so many countries have been torn apart, it is good to feel you are helping to build our country up and leave something for our

1

(Continued on page 40)



Derrick car sets girders weighing 27 tons on a bridge construction project.

Gleanings from Near and Far

Round the World

Very low frequency radio signals traveling completely around the world have now been detected by Jack N. Brown of the National Bureau of Standards. The signals. transmitted from the Naval Radio Station NSS at Annapolis, Maryland, on a frequency of 18 kiloeyeles with a power of 350 kilowatts, were received at the NBS radio propagation field station at Sterling, Virginia, about 50 miles away. Normal delay time for a round-the-world signal was more than a tenth of a second, and maximum signal intensity was observed at sunset.

The round-the-world signals were received, with the aid of a large loop antenna 150 feet high, on a tuned-radio-frequency receiver. A dual-beam oscilloscope was connected ahead of the detector stage in the receiver so that the actual unrectified r-f envelope was displayed on the 5-inch screen along with an 18 kilocycle reference voltage. The delay time of the round-the-world signals was measured by making a moving film record of the oscilloscope screen.

The test signal transmitted from NSS consisted of a series of dots, each dot followed by a quiet period equal in duration to five dots. The test tape was transmitted at normal sending speeds, so that the pulse length of each dot was about 40 milliseconds with a repetition rate of four pulses a second.

During the winter months when these tests were conducted, the delayed signal was visible throughout the entire day. Observations of field intensity over several 24-hour periods disclosed the striking sunset maximum. A sharp peak in signal strength at 4:30 p.m. corresponded to optical sunset at the place of transmission and reception. It is an observed fact that low-frequency signals are severely attenuated when their path crosses a sunset zone. Any round-the-world signal must cross a sunset

zone except during that portion of the day when the sunset zone is at the transmitter-receiver location. This explains the relatively greater strength of the signals at sunset in the transmitter-receiver location.

Delay times were measured on two different occasions under widely differing ionosphere conditions. Measurements were made first during a severe ionosphere storm, and a second set of measurements were made on a normal day. The average delay time during the storm was 0.1365 ± 0.0005 seconds, but on a normal day the average was 0.1373 ± 0.0005 seconds. The shorter delay time during a storm may be explained by the slightly lower effective height of the refleeting layer of the ionosphere under the influence of corpuscular bombardment from the sun. In any case the average values indicate a shorter propagation path for lowfrequency signals during an ionosphere storm.

The transmission of radio waves over long distances may be thought of either as the propagation of a "guided wave" between the concentric spherical surfaces formed by the earth and the ionosphere, or as successive multiple reflections from the earth and the ionosphere. Within the limits of a ray approximation, both pictures yield the same results. For the delay time on a normal day (0.1373 sec) the number of hops corresponding to an ionosphere height of 65 kilometers is 55 for one trip around the earth. The length of each hop is thus 728 kilometers and the angle of take-off is 8 degrees.

Lubricating Graphite

Electric contacts or brushes, made of graphite and used to feed current to moving parts in motors or generators on high-altitude aircraft, may have their useful life increased many thousands of times as the result of new lubrication methods.

Water, in the form of vapor, for the lubrication of graphite has changed accepted ideas that this solid and "slippery" material was a good lubricant in itself. Graphite consists of layers of atoms which can slide easily over each other, and it was formerly supposed that this property was inherent in the graphite alone.

It has been shown, however, that an invisibly thin film of moisture on graphite is required for its lubrication. Testing the wear against a revolving copper disk in a vacuum chamber, it has been found that dry graphite brushes were worn as fast as an inch within one hour. When a small amount of water vapor was admitted to the chamber, the wear rate was reduced to less than a thousandth as much.

For electric motors and generators working on the ground, the wear of brushes is no great problem, since there is generally enough water vapor in the air to provide the lubricating film of moisture. But modern aircraft, such as jet aircraft, fly at great altitudes in rarefied air at such a low temperature that water vapor is almost completely absent. Many motors and generators are required in such planes. Various methods of treating brushes chemically to prolong their lives have been tried, but still further improvement is needed.

A General Electric engineer has devised a means of shielding the parts of electric equipment where the brushes are used, and supplying water vapor to the space around them. In tests with this equipment he has found that brushes, which wear out in an hour without water vapor, will last from 2000 to 8000 hours. Certain organic vapors are more effeetive than water by a factor as large as 1000, so that extremely small concentrations (in the order of parts per million) provide lubrication.

Brothers, this is a real cry for help. This coming election is one of the most serious issues in your life—in the life of every member of organized labor. means everything to organized labor to hold friendly seats in Congress this November and gain others. A loss for labor this year could deal unionism in America a blow from which it might never recover.

We pray God that every member of our Brotherhood recognizes the seriousness of this situation—is registered and will vote.

And we need more! Labor's League funds are nearly exhausted—and with so much ahead still to be done. Instead of the \$2.00 per member we expected to collect, the average has been 71/2 cents. Brothers, that's a disgrace and your International Officers are ashamed for our organization to go down to defeatwe who have always led the way in doing our share.

Brothers, there's not much time left. Clip the coupon on this page, send it in at once with as large a contribution as you can spare. If you can send more than \$2.00—splendid! If you can't send \$2.00, send anything you can-\$1.00, 50 cents, a quarter, a dime. Labor's League needs every penny it can get to carry on the work that may spell life or death to the labor movement.

Do not fail organized labor! Do not fail our Brotherhood! Act now—today —that tomorrow will see the end of Taft-Hartley and a secure life for members of unions everywhere. Let's show our enemies we can fight back!

Please answer this call for help today!

INTERNATIONAL SECRETARY

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J. SCOTT	MILNE,	International	Secretary
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International Brotherhood of Electrical Workers 1200 15th Street, N.W., Washington 5, D. C.

Enclosed is my contribution of \$, to be used by Labor's League for Political Education.

Name

City

Street

State

L.U.

Card No.

Mitchell, Canadian Labor Minister and Former IBEW Member, Passes

THE DEATH of Humphrey Mitchell, Minister of Labor for Canada who for many years carried a card in the International Brotherhood of Electrical Workers, comes as a severe loss to Canadian wage earners. Brother Mitchell, who was 55, died in Ottawa on August 1. He had held his ministerial position with distinction for nine years.

During the war years, Brother Mitchell sponsored and promoted many measures to help wage earners. Among these was his piloting through Parliament the act requiring employers to reinstate men and women from the armed services in their old jobs.

Born in Old Shoreham, England, into a family of trade unionists, Mitchell became an apprentice electric operator and came to Canada in 1912 to complete his training. He served as financial secretary of Local Union 105, I.B.E.W., in 1919 and was elected secretary the following year. It was the start of an active career in trade unionism that was to take him to the top. For a number of years he was delegate to the Hamilton District Trades and Labour Council, which he served as president for two terms and secretary for 22 terms. He was a member and former chairman of the Ontario Executive Board, Trades and Labour Congress of Canada.

Among the various positions and appointment held by Brother Mitchell during this period were the following:

Member of special committee on workmen's compensation, under the chairmanship of the late Senator Gideon Robertson, Edmonton, 1928.

Served on a special committee of the Trades and Labor Congress Railroad Brotherhood in preparation of case sumitted to Chief Justice Middleton acting as a Royal Commissioner on Workmen's Compensation. Chairman or member of grievance committee, Dominion Power and Transmission Company and Hydro Electric Commission, Hamilton, 1919-29,

Secretary, Hamilton Co-operative Creameries, and prime mover in its organizations.

Delegate to the British Trade Union Congress, Brighton, England, representing Trades and Labour Congress of Canada, 1933.

Delegate to International Federation of Trade Unions, Brussels, Belgium, representing Trades and Labour Congress of Canada.

Visited Russia as a member of a trade union delegation, 1935.

In the field of politics, Brother Mitchell served as president and secretary of the Central Branch, Independent Labour Party of Hamilton; as secretary of the Independent Labour Party of Ontario; as a member of the House of Commons for Hamilton East, 1931 to 1935. He entered the service of the Dominion Government in 1935, as a member of a special committee to investigate relief camps. There-



Humphrey Mitchell

after he served as Director of Labour Transference, 1936-39 (demobilized relief camps, placing men in other employment. Also negotiated agreements with all provincial governments). Before being sworn in as Minister of Labour late in 1941, Brother Mitchell had served as Secretary of National Labour Supply Council, Chairman of Industrial Disputes Inquiry Commission, and Chairman of National War Labour Board.

Besides fathering the act requiring employers to reinstate men and women from the armed service in their old jobs, Brother Mitchell secured for labor representation on a large number of national, regional and local boards and committees, in connection with the work of the Labor Department. He also expanded employment service facilities, in the interest of workers and industry; promoted wartime vocational training for workers; sponsored federal financial help to provinces for postwar apprenticeship training; assisted in setting up Industrial Production Cooperation Board, to promote labor-management committees in industry; brought about the act giving workers in national and war industries the legal right to organize, and making collective bargaining between employes and employers compulsory, on request of employes' representatives; expanded conciliation services of the department; and sponsored plan for retraining of industrial workers, and vocational training of youth, for post-war period.

The biggest piece of post-war legislation Brother Mitchell piloted through the House of Commons was the new Labour Code, officially known as the Industrial Disputes Investigation Act. It overhauled legislation involving railways, communications and other inter-provincial enterprises.

On learning of Brother Mitchell's death, President Percy R. (Continued on page 69)

The First Labor Day

THE day is September 5, 1882. The place is New York City. Crowds of people are milling around the center of the city. They are quiet, dubious of the outcome of this new experiment which is about to be tried. Never before have laboring men been so closely united. Never have they been willing to forget their individual desires and sacrifice themselves for a single cause. The awe-struck crowd turn doubtful, yet hopeful faces toward the end of the long street. Then suddenly there is the sound of music and the silence is gone. The parade is coming! Hundreds of happy voices cheer the lines of marching men, men whose endless toil has thus far gone unheeded. This is the first Labor Day.

As we look back on it today, there are a number of points of contrast between that first Labor Day and the Labor Day that we know. Most prominent among these, of course, is the fact that now the first Monday in September is celebrated as a nation-wide holiday. On that September day in 1882, the army of laborers did not reach its full strength until the evening, for the majority of employers refused the request of the Central Labor Union to proclaim a holiday. Now we take it for granted, and here we come to another point of contrast.

Real Significance

Many people today are inclined to lose sight of the true meaning of things because they have not had to struggle for them in the same way their fathers did. They expect more for less because that's what they're used to. It is unfortunate that the real significance of Labor Lav has been lost to many in this same way. That first Labor Day parade embodied all the hopes those men were striving for. It signified to the world that this new force of organized labor was coming into its own and ready to take its place in history as one of the greatest and most successful struggles of the masses against tyranny.

The first person to conceive the idea of dedicating a particular day each year to the laboring classes was the general secretary of the

Brotherhood of Carpenters and Joiners, Peter J. McGuire. He made the proposal to the Central Labor Union of New York, to which he was a delegate, in order that, ". . . there might be some occasion devoted to the industrial spirit, the great vital force of every nation." The American Federation of Labor took up the work of the New York Central



A contemporary print of the first Labor Day parade.

Labor Union and the rapid growth of this organization was accompanied by widespread acceptance of the observance of Labor Day. Outside the realm of labor, however, its acceptance was far from spontaneous. Employers were reluctant to sacrifice a day's labor, and industry in general feared the rise of too great a force. Therefore, the first official recognition of Labor Day as a legal holiday did not come until 1886 and at that time a movement developed to secure state legislation. The first bill was introduced into the New York legislature, but the first to become law was passed by the state of Oregon on February 21, 1887. This law, however, designated the first Saturday in June as Labor Day but was amended in 1893 to conform to the general plan which by that time was widely accepted. On June 28, 1894, Congress passed an act making the first Monday in each September a legal holiday.

Interest Was Intense

There are still other ways in which the first Labor Day differed from our present holiday. Unfortunately, the day has lost some of its old glamor. It used to be like a circus day, a day in which every member of the working man's family took an interest. Elaborate preparations were made in advance of the celebration. The parade came first and this was followed by a picnic for the workers and their families. From midafternoon to evening there was speechmaking, with McGuire himself one of the best-received speakers. Today, all too many people regard Labor Day as merely marking the end of the summer vacation. Let us be grateful that these are not the majority, that there are still many who remember and cherish Labor Day.

Fundamental Difference

The most substantial change, however, is not in the way in which Labor Day is celebrated, but in the men who celebrate it. It used to be an affair only for men who worked with their hands; it is now an affair for all men who work, many of whom run machines. The

Labor Officials Pledge LLPE Support



At the recent Labor's League for Political Education meeting held in Washington, International President Tracy made a fighting speech supporting the work of L.L.P.E. and pledging his all-out help and that of the Brotherhood to the all-important League work. He is shown here after his stirring address, shaking hands with President John P. Burke of the Pulp, Sulphite and Paper Mill Workers who also pledged the help of his organization. The two-day meeting was held in Washington in July—the first day for officers of national and international unions and the second for officers of State Federations and Central Labor bodies. L.L.P.E. Director Joseph Keenan made a strong appeal for united support in the coming November election and asked funds to finance the League since contributions he said, had "bogged down badly."

methods of work have changed so radically as to alter the meaning of the term "laborer." And this is rightly so. The power and strength that unity has brought to the working man are no more than are due to him. His privilege to improve his lot is sacred and the struggle has been tedious. That is why Labor Day should be such a pivotal point in the life of the nation. No, the points of contrast between past and present Labor Days do not necessarily balance in favor of the ardor and intensity of past celebrations. Rather, there have been many improvements since then. The laboring class has succeeded in making itself heard and its will respected. In most places today, work is prohibited on Labor Day, and union members violating the rule are penalized.

Such drastic provisions emphasize the veneration in which Labor Day is held by American unionists, and the earnestness of their efforts to preserve its essential significance. The devotion which laborers have to this day was fittingly expressed by Samuel Gompers when he said, "The marching toilers in the Labor Day demonstrations recognize . . . that if man is to be free in the time to come, eternal vigilance must be exercised, organization of the workers proclaimed, maintained and extended, education of the educated as well as of the masses be furthered and nurtured. and agitation of labor's wrongs endured and rights denied undertaken, with all the zest and energy begotten by devotion to a cause which is at once holy, noble, pure, lofty, just, wise and humane."

The I.B.E.W. Against

A ROAR, a crash, a brilliant streak of white fire splitting open the black, storm-swept skies—that's the destructive force of lightning running wild. Lightning is a strange, freakish power, it is nature in her angriest, most dangerous mood, and almost all men have an inborn fear of it—and rightly so, for lightning is a killer. While few are aware of the fact, more persons are killed annually by lightning than by tornadoes or floods or on all of our railroad systems combined.

And the annual loss to churches, schools and industrial buildings is in excess of \$16,000,000.00 Average yearly lightning loss to farm property in the United States is over \$20,000,000.00. Lightning ranks first among the known causes of fire loss to farm barns. And when homes and other property are taken into consideration the damage figure rises to more than \$52,000,000.00 annually.

And these figures cover insured property only. The loss to uninsured property is reliably estimated at \$10,000,000.00.

These are not rough estimates but are cold facts gleaned from the records of the United States Government and the National Board of Fire Underwriters.

One insurance company which for many years has kept its light-ning losses segregated from its general fire losses, estimates that the weekly lightning and fire loss in the United States averages:

12 Churches

10 Schools

2 Hospitals

2 Colleges

1,600 Dwellings

And their records show that lightning is their greatest cause of loss.

Now—that's the not-so-pretty picture of lightning and what it can do to people—to their homes, their churches and their schools. But the bright side of the picture is, that adequate protection against lightning can be had and members of the International Brotherhood of Electrical Workers are engaged in the important work of manufacturing the lightning rods and other lightning protection equipment which spells safety against this powerful and ruthless force.

There are three companies to which we should like to call the attention of our membership. These are the St. Louis Lightning Protection Company, Bajohr Lightning Protection Company and the National Lightning Protection Company. These companies are all located in St. Louis and have been organized under an agreement with our Local Union No. 1 there for the past 10 years. To the best of our knowledge these are the only lightning rod companies under I.B.E.W. organization in the United States.

We call your attention to these firms in order to solicit support for them. These companies are having a difficult time due to the fact that there are many non-union firms of this type operating throughout the United States which at times underbid them on jobs. This causes a loss of business giving rise to cuts in production and personnel. This is important manufacturing work and the outside installation work is extremely hazardous and requires good electricians who know how to rig.

We want all our members to know of the efforts of their Brothers in this field and give support to the union plants which employ them.

It is a significant fact that the union men who have done so much to harness the forces of nature into productive electricity to light the homes and run the factories and create power for America, should also know much about controlling the forces of nature and protecting their fellow men from its ravages. It's the I.B.E.W. against lightning! Give union Brothers your support!



Footnotes to History

Coxey's Famous March



General Coxey

A MONG the economic depressions which have periodically visited the United States, the one of 1893 has gained a special place in American history books. While not as deep or pervading as some of the others, it gave rise to a phenomenon known as Coxey's Commonweal Army, or more popular "Coxey's Army." Fifty-seven years ago the "general" of the Army, Jacob S. Coxey, made his famous march from Massillon, Ohio to Washington, D.C. to present his plan for curing the depression.

Coxey's plan, briefly called for a medium of exchange without interest, public bonds without interest (to finance a large program of public works), and for common carriers to operate without private profit. A prolific and persuasive pamphleteer, Coxey had many thousands of followers.

Originally, Coxey had not planned to lead the Commonweal Army to Washington. He had merely wanted to present a petition to Congress bearing the signatures of his followers. But then he began to be plagued with the idea that his petition would be pigeonholed and forgotten. So he issued a bulletin to his followers, giving a plan of organization for a march on the nation's capital.

The march started March 25, 1893 and reached Washington more than a month later. En route, the army rarely included more than 500 men, but in the march up Pennsylvania Avenue an estimated 2,000 followers participated.

Like many other dedicated men before and since, Coxey often spoke of himself in the third person, and in a pamphlet published in 1914 he described the Commonweal's entry into the District of Columbia in the following words:

"Sunday, April 29, the commonweal, under the personal command of J. S. Coxey, reached the District of Columbia, going into camp at Brightwood Park. . . . On arrival at Washington, Mr. Coxey called upon the Vice President and Speaker of the House and requested permission to hold a meeting on the Capitol steps, which request—while not granted, was not denied. Promptly on time, May 1, at 12 M., the Commonweal reached the Capitol, be-

ing greeted on the line of march and at the Capitol by the largest concourse of people ever to assemble there. Police interference prevented the army from reaching the Capitol steps, but by a strategic movement Mr. Coxey reached the steps only to be confronted by a lieutenant of police who forbade him to speak from the Capitol steps."

Coxey and two of his principal lieutenants were arrested and imprisoned for 20 days for "treading on the turf or grass and injuring the shrubbery." The army quietly disbanded and went its several ways. Maryland cops inexcusably arrested a few followers who came their way. That was the bitter end of the famous march.

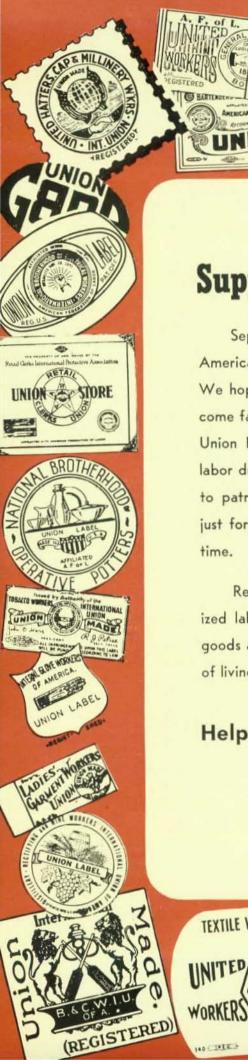
Coxey didn't like banks and once outlined his beef with them as follows:

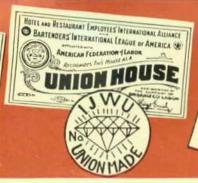
"We have granted franchises to banking corporations for the last 50 years in violation of the Constitution. . . . After granting these franchises, then the Government creates money and turns it over at cost to these corporations, but when even the Government itself (which has created it) wants to use the money, how does it obtain it? It issues inter-

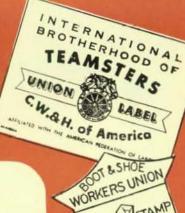
(Continued on page 68)



Coxey's Army at the Capitol.







Factor

UNION SHOP

Support the Union Label!

September 2-9 has been set aside throughout America for the observance of Union Label Week. We hope all our members will make an effort to become familiar with the Union Labels, Shop Cards and Union Buttons of our fellow members in organized labor during this week and will make a firm resolution to patronize the union workers they represent-not just for one week, or even one year-but for a lifetime.

Remember by helping other members of organized labor we help ourselves too. By buying union goods and employing union labor we boost standards of living all along the line.

Help Your Brother!

TEXTILE WORKERS' LABEL

A.F. of L.

140 TALK

TEXTILE

AMERICA

Help Yourself!

Buy Union!





Salute to the Workers

Once again we celebrate a Labor Day-the one day of the year dedicated to all who work. This is the day we honor the miners who go down into the bowels of the earth and bring up the coal to warm our houses and run our factories. We honor the bakers who knead the huge seas of dough and fire the ovens and bring bread to the tables of America. We pay tribute to the men and women who toil in clothing shops and create the garments that make our people the best dressed in the world. We salute carpenters and bricklayers and plasterers and painters who build the houses that give us shelter and those who create our machines and those who run them. We salute them all-every man and woman who works, and by their united effort, make our country the big, efficient nation it is, with the highest standards of living in the world.

The working people created the America we love and they have done something else. By uniting into unions they have not only dignified and glorified their labor, they have demanded and received a share of the advantages, the comforts which they helped to create in their nation.

The American working man, the laborer, is envied both by rich and poor in nearly every country in Europe and Asia. His material and cultural advantages, his freedom, cannot be equalled anywhere.

Yes, the working people of America have a real stake in this nation. They have achieved dignity and recognition and a measure of success and happiness. BUT they must be ever vigilant of their rights and their privileges. They must unite as never before to guard those rights and privileges here—they must exercise their most precious privilege, their vote, and they must unite as Americans against foreign aggression and the forces of communism and do whatever is necessary to keep our country the free, democratic nation it has always been and please God always will be.

Let us resolve on this day, our day, to be better workers, better citizens, better Americans so that there will always be a Labor Day and we will always be worthy of the tribute that is ours on that day.

The Electrical Worker

We have just paid tribute to all the workers of our nation. In this editorial we want to make special mention of the workers of our trade.

In the United States, which has only seven percent of the world's population, there is produced and utilized nearly one-half of the total electric power generated on the earth. This is nearly six times that of the next nearest country, Russia.

It is this electric power that has made America the foremost nation of the world. And who has harnessed this vast power and chanelled it to the people of America enriching the lives of all? Why the electrical worker. It is the electrical worker who controls the power that lights a 1/6th watt "grain of wheat" lamp or a 50,000 watt flood light. Or turns the 2 watt electric clock motor or the 87,000 horse-power wind tunnel motor. Or charges a door bell transformer or a 175,000 kva power transformer; heats a curling iron or a giant electric furnace; grinds feed, milks cows, churns butter; heats or cools the air we breath or brings us television.

The electrical worker controls this power giant

that is electricity and makes it do the consumers' bidding, be it for great power or little.

It seems to us in the Brotherhood that electrical work ranks with the finest among all the trades and professions. It is challenging, it is changing, it is growing. Still in its infancy there are no limits to the heights it still may reach. And the workers will go along, learning, progressing, accepting the challenge the growing industry throws down.

There's an old saying which has often been quoted about workers. It is:

"The man who works with his hands alone is a laborer.

"The man who works with his hands and brains is a craftsman, and the man who works with his hands, brains and heart is an artist."

Electrical workers, like all workers must use their hands. They do so with skill and precision. They must use their brains too—in our work, we must to stay alive. But by the very nature of the work—its inspiration, its challenge—electrical workers put heart into their trade too—they're artists all right—in every sense of the word.

School Days

This month of September will see your child and mine and every child in America under the age of 16 going back to school and getting the education that will fit them to become intelligent, useful men and women, well equipped to take an active part as citizens of this nation.

It was not always thus—if we were to turn the clock back 50, 40, even 30 years, we would find quite a different picture for many of the children of our nation. Instead of happy, carefree, well-dressed young people, going off to school with their books in their arms, we might see pale children with sunken cheeks and hollow eyes-old children who had not yet reached the age of 12 or 13, going off to work in filthy coal piles, dusty mills, airless factories. Poor little children, improperly clothed and ill-fed with never a chance to learn or play in the sunshine.

And what made the difference?

It was the American Federation of Labor that led the fight to abolish child labor and get legislation passed in every state in the nation, that would take the children out of the coal mines and the cotton factories and the woolen mills and put them into the schools where they belonged. It was the A. F. of L. that led this fight and the others—the ones that eliminated the causes that prompted child laborstarvation wages, long hours and inhuman working conditions. The A. F. of L. has been a fighting organization since its inception. It had real fighters in the early days. It needs real fighters now. There are many battles behind us but there are tough ones still ahead, if we are determined to take no step backward toward those darker days.

A. F. of L. members of today are made of as good and courageous stock as those who went before us in those early fights. We will not fail our heritage. We will stand and fight for our rights as did Sam Gompers and Henry Miller and those other courageous pioneers of days gone by. We'll rid labor of the Taft-Hartley scourge and we'll go forward to create a better life for ourselves and our children.

Russians and Americans

Russia is a huge country, rich in natural resources -land and minerals and oil-and with abundant manpower to man her farms and her factories and do anything she might want to undertake. And yet standards of living in Russia lag half a century behind ours. Why?

Because in Russia people don't own property, they have no freedom of thought, of worship, of speech or of work. They do as they are told. They do not dream or plan because it can net them nothing. There is no enterprise except the enterprise of the state. To achieve, people have to have personal incentive and they have to have hope-hope that if they work hard that what they strive for will come to pass.

That's the difference between Russians and Americans. Americans dream and plan and then work to see their dreams and plans come to fruition and by so doing, they've raised their living standards to heights no other nation has nearly attained. In Russia personal incentive is dead—the people plod on in the same old way, with the same old tools, working for the state, with their personal ambition dead within them. Men who are more slave than free, never have and never can, attain what free men, fired with ambition and the spirit of enterprise, and backed by a nation that nurtures such feelings in her citizens, can attain.

America, so long as she remains a free nation of free citizens will always be 50 years ahead of Russia

Life Saving

If you saw a child fall into a pool of water over his head, you'd try to save him, wouldn't you? If you saw a child attacked by a mad dog, wouldn't you rush to do what you could to help him? Sure you would! But do you drive carefully, obeying traffic regulations? Or do you go madly on your way driving as you please, creating a more deadly menace to the children of our nation than all the pools and all the mad dogs of the past 25 years combined. At the risk of being very dull, we're going to quote a statistic or two for you. Do you realize that last year for every million vehicle miles traveled, seven people paid with their lives? By accident injury statistics issued by the National Safety Council, one out of every 150 people in these United States will be injured in an automobile accident this year if nothing is done to reduce the 1949 rate. And for those of you who may be interested in knowing just what accidents cost the American people in dollars and cents, last year in the form of property damage, medical expenses, etc., the figure is estimated at \$19.00 for each man, woman and child in the United States. That means that accidents last year cost our people nearly three billion dollars.

Brothers, with the nice fall weather coming on, more and more cars are going to be out on the road, and more of our children are going to be out playing, crossing roads and streets with little thought to the dangers involved.

Resolve to drive carefully, and obey the rules. Don't speed. Slow up for intersections even when you have the right of way. Watch the highway caution signs. Be especially careful at railroad crossings. Abide by the speed limits. Have your brakes checked regularly. Don't take chances passing on hills and curves, and dodging in and out of traffic. And watch for children playing.

You won't be sorry if you do, but if you don't do these things and you have a serious accident or run down some little child, you'll regret it to the longest day you live.

Resolve to drive earefully and remember the life you save, may be your own!



Q. Can you give me the name of a good motor data book for armature winding?

> John P. Woo, I.O. member, San Francisco, Calif.

A. A good practical text book is "Fractional Horsepower Electric Motors," by Cyril G. Veinott, published by McGraw Hill Book Company. A practical book for beginners is "Electric Motor Repair," by Robert Rosenberg, published by Murray Hill Books, Inc., New York and Toronto. We may mention that armature winders generally keep a card index on various type motors for future reference.

We have received many inquiries asking for recommended books on conduit bending. Here are two: "Precision Conduit Bending" by Juan Boas (\$1.50), 2054 East 47th Street, Brooklyn, N. Y.; "Conduit Bending Manual" by Kruger and Ferry (\$1.50), C.B.M. Publications, 6555 77th Place, Maspeth, N. Y.

Q. I have a 1/12 H.P. Direct Current Gear Head Motor. Do you know of any rectifier or converter that I may use this motor on A.C. current? I would like something economical in price. Do you know of any such manufactures and if so please send the names.

Ralph Mathews—Local No. 1 St. Louis, Missouri

A. There is no economical rectifier that will convert the 115-volt A.C. to 115-volt D.C. for an approximately 2 ampere load. General Electric Company's Full Wave Mercury Tungar No. GRB-3E4 lists for \$83.00 plus taxes with a capacity of 2.0 amperes at 115 volts A.C. to 115 volts D.C. The less expensive rectifiers copper oxide type give low voltage and low amperage D.C. output.

It would be more advisable to purchase a new 1/6 H.P. 115/230 V.A.C. split phase gearhead motor that lists about \$69.00 plus taxes.

Send Your Questions

and Comments
to:
Q and A Dept.
ELECTRICAL WORKERS

JOURNAL,

1200 15th St., N.W.

Washington 5, D. C.

Q. In the July issue, on Page 77, Brother Frank II. Berg makes the following comment:

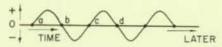
"This lead and lag business is all too confusing with very poor books to explain it clearly to the novice."

As an instructor of long experience, I have taken the liberty of

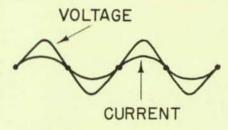
sending you a little lecture on "Lead and Lag." I invite your attention to the unique emphasis on time. This presentation reveals the physical facts unobscured by mathematics and mystery.

> NICHOLAS B. COOK —L.U.B-1338 Paterson, N. J.

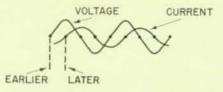
- Direct current flows in one direction only; that is, a given terminal is either positive or negative.
- 2) In an alternating current system the current periodically reverses its direction of flow and continually changes its magnitude. These changes are represented by the familiar sine wave.
- The sine wave shows the changes in direction and magnitude plotted against time. This fact is all important.



- b is later than a
- e is later than b
- e is earlier than d. etc.
- Both current and voltage may be represented by sine waves.
 They may be referred to the same reference line.



5) In Figure 2 voltage and current are changing in the same manner at exactly the same time. They are in step, or in phase. The phase difference is zero.



In Figure 3 both voltage and current are changing in the same manner but the voltage changes recur earlier than the corresponding current changes. Hence the voltage is leading the current, and the current is lagging the voltage. A lagging current goes through its changes later than the voltage that produces it.

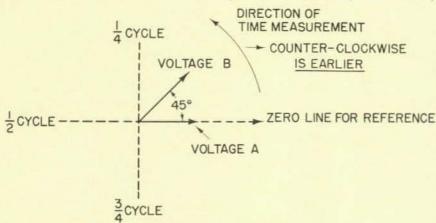
 Many circuits have the property of causing the current to lag behind the voltage changes. Coils have this property.

To demonstrate time lag, fasten a rubber band to a small paper weight lying on a desk. Give a smart pull on the rubber band. The weight will follow but there will be a time lag.

8) Some circuits have the property of causing the changes in current to occur before the changes in voltage. This is characteristic of a condenser or capacitance

To demonstrate time lead, lay a pencil along the edge of the desk. Carefully push the pencil over the edge and try to follow it with your hand. The pencil leads on the way down.

- 9) The terms lead and lag are related to time and to nothing else. Strictly speaking, it is not a question of making the proper connections of in and out, of convention or notation. If one voltage leads another it is a relation in time.
- Vector diagrams show how electrical quantities are related in magnitude and in time.



Voltage B leads voltage A by 45 degrees or by ½ eyele in time. Voltage A lags voltage B by 45 degrees or by ½ eyele in time. In a 60-eyele system a time dif-

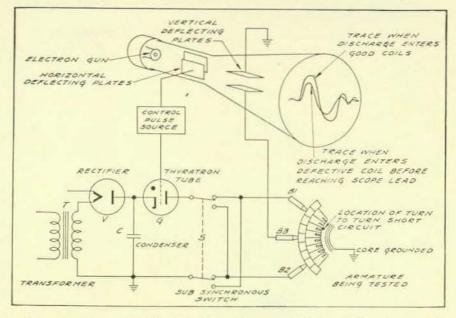
 To achieve correct time relations in a machine or measuring device, given correct voltages and currents, it is necessary to establish the proper connections.

ference of 1/2 cycle is 1/480 second.

low currents with surge characteristics. Surge generators as such were not entirely new, but those used for such work as transformer testing were cumbersome and expensive. To meet this need and to amplify the testing equipment of repair shops, there has been developed what is termed a "surge comparison tester."

This device is of electronic design, arranged specifically to cover two functions—1) to apply a voltage stress between turns of a coil, between

Surge Comparison Testing



For many years, electricians had to be satisfied with a rather brutal tester known as a Shooting Box for an indication of the sufficiency of the insulation to ground in a given machine. This method of testing from conductor to ground is still producing satisfactory results, but it cannot be used to determine the value of the insulation between turns or between coils, without running into excessive currents.

It has been realized for some years that there was a great need for a compact, portable machine that would produce a high voltage at relatively phases and from winding to ground, and 2) to detect shorted turns in windings under test. The turn and phase insulation is stressed by the application of a repetitive surge voltage to the winding.

The essential component elements of this tester are—a surge generator, a cathode ray tube and switching arrangements for conducting the various classes of tests. The surge generator consists of a high voltage transformer, a pulse generator and synchronous switch arranged to impress high voltage surges of short duration on the windings under test at the rate of sixty times a second. The resultant pattern of these surges is indicated on the cathode ray tube.

The schematic diagram below shows the general arrangement of circuits. Transformer (T) steps up the voltage to the test potential required. Rectifier tube (V) permits the condenser (C) to charge during one-half of the cycle. At approximately the middle of the next half cycle when subsynchronous switch (S) is in the position shown, the Thyratron tube (G) receives a pulse from the control source which permits the condenser to discharge through the sub-synchronous switch and the armature under test.

The discharge proceeds through brush B₁ and through the winding to brush B₂ which is grounded. A full cycle later, the sub-synchronous switch will pre-set the direction of discharge, so that it will enter brush B₂ and proceed to brush B₄. Brush B₅, which connects to the vertical deflecting plate of the cathode ray tube, is located half way between B₄ and B₅. The cathode ray tube indicates the instantaneous potential of brush B₄ to ground.

(Continued on page 40)

With the Ladies

School Days, School Days

YES, IT'S September again and time for the children to start back to school. It seems every year on your page in the September issue, we urge all our mothers to send the children back to school. Help them to get every bit of education they can. It will stand them in good stead some day when they are grown and job hunting.

It's an encouraging factor in our everyday lives these days to know that more and more of our people are realizing the value of education and are striving to acquire just as much of it as they can. Just look at the vast number of young men and women who availed themselves of the educational advantages of the G.I. Bill of Rights. They realize that competition is keen in the world of today and the young person who is best fitted in knowledge and skills is the one who is going to forge ahead.

Keep Them In School

So mothers, do your darndest to keep your high school boys and girls in school. Don't let them forsake their education for some job that holds no future. And encourage them to continue their schooling in college or night school after graduation if at all possible. If they have to work to help themselves some, so much the better—the education that is acquired with some sacrifice is all the more valuable and valued.

Now, more about this school business—school would be good for you too. Yes, we mean it. There is nothing like the study of a new subject or craft, mixing with new people to keep you alert and interested and give you a new interest in life.

Never in the history of our country have so many grown people been going back to school. A survey made recently showed that at least one out



of every three people over 21 years of age, was engaged in a study class of some kind.

Adult Education

The public school, the local Y.W ,-C.A., the public library all offer interesting courses. You may choose a foreign language, English, history, creative writing, or perhaps you'd like to master or brush up on shorthand and typing. If these subjects hold no interest for you, what about one of the handicrafts? Ceramics is fascinating to learn and can become an interesting and profitable hobby. (Make your own wedding, birthday and Christmas gifts.) Perhaps dressmaking or hat designing or jewelry making would be interesting for you. Or maybe home decoration is where your talents lie (or you wish they would). There are cooking schools too, for those who would improve their culinary ability. Music is a wonderful field for your energies. You're never too old to learn to play an instrument and you can have one wonderful time doing it. Creative dancing is another enjoyable pursuit and marvelous for the figure.

Don't Grow Stale

Well anyway, girls, the point is—don't let yourself grow stale. I know you're busy, we all are. But you'll be a happier person and more interesting and companionable to your husband and children if you have an interest that stimulates you and keeps you from becoming a complete "Polly-Sit-By-The-Fire." You don't need to neglect home duties—you can choose a pursuit that is not too time-consuming but by gum choose one and see if life doesn't become a lot more interesting not only for you but for friend husband and the offspring.

Now, a word about those grade schoolers who may not be too happy about going back to school. They'll go lots more cheerfully if they can have a few bright new school clothes to wear and an interesting assortment of tablets, new pencils and perhaps a shiny new pencil box or bookbag to take on the first day. I know when I was a child, the end of vacation was much more easily borne and my spirits bolstered by a new school dress and brand new oxfords and an interesting supply of pencils, pens,

erasers and other equipment to take with me.

The First Day of School

If you have a little first grader just starting out, perpare him or her about what to expect. Talk over the prospect brightly as something to be enjoyed with lots of other little boys and girls. When you take small Jimmy or Sue on that first day, as soon as you have deposited him or her with the teacher, make a rapid departure. Leave no time for clinging or tears and for heaven's sake, regardless of how badly you may feel about "your baby going to school" don't let the child suspect it. The teacher knows how to handle the situation and will soon have Jimmy or Sue happly adjusted to the job at hand IF you do not hang around to disrupt her plans, even though you have the best intentions in the world.

And for all your school children, big or small, try to be home when they get there and have a warm welcome waiting for them. Don't forget growing children have healthy appetites, so a supply of apples, cookies or just "bread and jelly" are a necessary part of the welcome home.

Space is running short, but just a few words on homework. Take an interest in what your children are doing. See that they do the work the teacher assigns, and help them with it if they need help. If you have to miss your regular television program, you won't be sorry when report time comes, for those who have studied the situation say that children who receive help with their homework at home usually surpass their fellow students who do not receive help, in honor grades.

That's all we have room for this month. Hope your school year will be a happy one for you all.



The Electrical Workers

Our Auxiliaries

This month in our auxiliary column we want to make a special appeal to every auxiliary member to do a certain thing and to influence every woman with whom she comes in contact to do that thing also. We refer to Hoarding. It is simply disgraceful to read in the paper of runs on sugar and soap and canned goods, hose and girdles and other items which people think might become scarce, Our President has told us there is plenty of food and goods for us all if we will be sensible and let our sense of fair play and patriotism rule us. When young men are dying on foreign battle grounds, it is criminal for their fellow citizens here at home to be greedy and selfish and cause false shortages. Please, women of labor, do your patriotic part. Let's take our chances, share and share alike and have no part of hoarding .

Here are the letters received from our auxiliaries this month.

L. U. 26, Washington, D. C.

The Ladies' Auxiliary to Local 26, Washington, D. C., installed the following officers for the year 1950: President, Mrs. Frances Scruggs; vice president, Mrs. Eileen Beach; secretary, Mrs. June Justice; treasurer, Mrs. Grace Jarrett; Executive Board: Mrs. Laura Shoemaker, Mrs. Buelah Hope and Mrs. Betty Roadhouse; Entertainment, Mrs. Nellie Cox; Sick Committee, Mrs. Emma Love and Mrs. Virginia Frank; Birthdays, Mrs. Ila Wren.

Our 12th Anniversary was celebrated with a dinner and dance for members and their husbands, on April 21st at the Casino Royal Night Club. We had as our special guests Mr. and Mrs. Clem Preller. Mr. Preller is business agent for Local 26.

On April 19th, the Auxiliary was entertained with a luncheon and show given by the Potomac Electric Light and Power Co., from which the auxiliary received \$48.00. The lunch and show were enjoyed by all.

After the business meeting on June 27th, a stork shower was given to Mrs. Nina Cox. She received many lovely things for the baby-to-be.

On July 10th, a big surprise shower, with a wonderful turnout, was given to Mr. and Mrs. Paul Scruggs, at their home for their new son, William Paul. William Paul received lots of fine things to wear. The auxiliary seems to be furnishing the future electricians.

On July 12th, a boat ride was given and there was a good turnout for this too, considering the weather. As all (Continued on page 69)



Summer's End-Labor Day Picnic

Why not end your summer with one grand gala outing and what could be better than a picnic on Labor Day? If the males in your family are marching in a Labor Day parade, and we hope they are, make it a picnic supper at the end of the day. Here are some suggestions for the picnic basket.

If you have a little charcoal grill, cheeseburgers will be just the different kind of sandwich to be made outdoors, you've been looking for.

CHEESEBURGER

Toast required number of hamburger rolls. For each sandwich broil a hamburger patty. While the meat is broiling, place thick slice of American cheese on one half of a toasted roll and place under broiler. Remove when cheese begins to bubble. Place broiled hamburger on other half of roll, cover with the grilled cheese roll. Serve hot.

And to my way of thinking a picnic isn't a picnic without:

POTATO SALAD

4 cups diced cooked potatoes 1 cup chopped celery 2 tablespoons chopped parsley ¼ cup French Dressing

2 tablespoons grated onion salt, pepper to taste

1 teaspoon prepared mustard mayonaise

Combine potatoes, parsley, onion and celery. Mix with French Dressing. Season to taste; chill. Just before serving add mayonaise blended with mustard. Serves 6.

We like baked beans on our picnics, fixed the easy way.

EASY BAKED BEANS

2 cans baked beans 2 tablespoons catsup

1 small onion chopped fine 1 teaspoon Worcestershire sauce 2 tablespoons molasses 1 teaspoon prepared mustard

4 hot dogs sliced thin

Mix all ingredients together and place in baking pan or flat casserole. Heat in oven until browned on top. Wrap well in several layers of newspaper and they will keep warm for hours.

Every picnic must have a cake. How about an old-fashioned Fudge Cake?

FUDGE CAKE

1 cup boiling water
14 teaspoon salt
15 cup cocoa
18 cups sifted flour
16 cups sugar
1 teaspoon baking soda
1 teaspoon baking powder
1 teaspoon vanilla

% cup sour milk or buttermilk

Add boiling water slowly to cocoa, making a smooth paste; cool. Sift together flour, soda, baking powder and salt 3 times. Cream shortening, add sugar gradually and cream togther until light and fluffy. Add unbeaten egg yokes and beat vigorously; add vanilla. Beat in cooled cocoa mixture. Add sifted dry ingredients alternately with the milk. Fold in stiffly-beaten egg whites. Pour batter into pan 9x12x2 inches, which has been greased and lined with wax paper. Bake in moderate oven (350° F.) 40-45 minutes. Ice with your favorite fudge frosting.

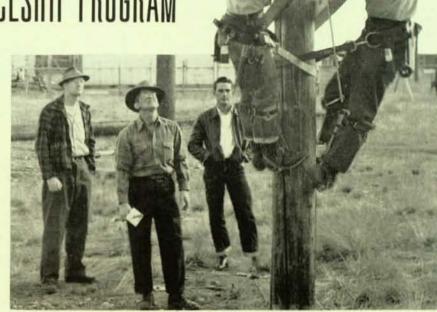
Union-Management Cooperation in SPOKANE APPRENTICESHIP PROGRAM

NATION-WIDE attention is being directed to an outstanding apprentice training program established jointly by Local Union No. 77 and management in Spokane, Wash.

The program begun in 1948, graduated seventeen apprentices this year. They were honored and received their diplomas at a dinner meeting held on May 13. The diplomas were handed to the gradnating class by Assistant General Manager Richard McKay of the Washington Water Power Co., the company which has, by cooperation with Local 77, made the apprentice training program possible. Through it, better trained journeymen can be provided and high standards of workmanship can be maintained through expanded knowledge of technical and theoretical aspects of jobs.

Regular on-the-job training is augmented with classroom work and home study courses. Schooling phases of the program are handled by the Spokane Trade School with E. J. Griffin, director and principal in charge.

The program was developed by the Joint Apprentice Committee, which consists of three members from labor and three appointed by management with the assistance of the Federal Bureau of Apprentice-



Apprentices gain practical knowledge through use of actual equipment on sawed-off poles.

ship, the United States Department of Labor, and the State Board of Vocational Education.

Last year the training included only the classifications of apprentice lineman and apprentice electric mechanics. In the coming year additional classifications of junior operators, apprentice servicemen, apprentice metermen and apprentice relay and meter testers are to be added.

Last year there were 29 apprentice linemen and four electric mechanics in the program. During the coming year, in addition to

these, there will be seven new apprentice linemen, three apprentice servicemen, three apprentice metermen and two relay and meter testers included in the program.

One of the primary difficulties overcome in the establishment of the joint apprenticeship training program was the great expanse over which the activities of the Washington Water Power Company took place. The apprentices were not centrally located where they could, with convenience, take 144 hours of classroom instruction per

(Continued on page 68)



Spokane's apprentice training committee includes, from left: Paul Hopkins, Harold Carver, J. D. Pitcher (secretary), Oscar Rannenbach, Glen George (Chairman), Len Stern.

BELOW—Instructor C. W. Bacon, left, gives some pointers on circuits to apprentices Robert Marksbury, Dean Eisenbarth and Richard Sampson.



RIGHT—Hotstick training class goes through its paces. On the poles are Melvin Baker, Clair Lowder, Harry South and Earl Jessick. Instructors, at right, are Paul Hopkins and Cy Hall.



LEFT—This group includes, from left, standing: Earl Jessick, Lon Rader, Cy Hall, Don Hagen, Clair Lowder, Melvin Baker and Harry South. Kneeling at right is Paul Hopkins.



ABOVE—Instructor Jack Sherriff, wearing hat, gives practical mechanical instruction to apprentices Earl Ferrier, Wayne McKessick and Clayton Ludwig.

Products and Installations

Electronic Detector Used to Find Faults



All fuel and traction tanks produced by the Lintern Corporation of Berea, Ohio, are now being tested with a leak detector.

The completely welded fuel tanks are made for use in large transportation trucks and have capacities ranging from 85 to 150 gallons. To make certain there are no possible places for gasoline to seep out, all welds are checked by the portable detector before the finished tanks pass from the assembly line.

Six welders and one inspector armed with the leak detector can turn out about 18 tanks in the average day. Fabrication is in six stages. The tanks are placed on iron rails rather than positioners so that they can be pushed from one welding booth to another as they move along the assembly line. The top plates of the tanks are made of mild steel deck plate; the bottoms and ends are 12 gage sheet steel. First the inner baffles and braces and the bottom sections are tacked together, the side panels are then tacked on, and final weldments are made after all the parts are assembled. The weldments measure about % in. Sixty feet of welding electrode goes into each tank.

When the finished tanks reach the end of the assembly line, the inspector checks all welded seams with the leak detector. This electronic instrument is so sensitive that it can detect leaks small enough to release only one ounce of gas a century. Previous leak testing methods were unsatisfactory, Lintern engineers said,

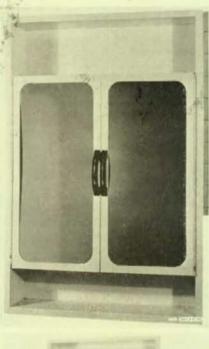
because they uncovered only the large leaks. The new instrument enables the company to detect the smallest of leaks in a tank and these can be repaired before the unit is shipped, they said.

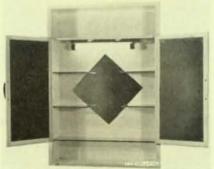
Los Angeles Member Introduces Cabinet

Something new in bathroom cabinets has been produced by a Los Angeles I.B.E.W. member.

A principal feature of the new cabinet, developed by Brother John N. Fatkin of Local Union 11, is fluorescent lighting. It is a one-operation cabinet which enables the user to see the back of the head and neck without resorting to hand mirrors. This is accomplished by five mirrors incorporated into the cabinet.

Brother Fatkin has carried an I.B.E.W. card for 50 years.





Cabinet features fluorescent lighting.

New Hook-On Wattmeter Has Multiple Uses



A new hook-on wattmeter applicable to active and reactive power measurements in single and polyphase circuits has been announced.

The new device enables measurements to be taken without service interruption. It makes use of a removable magnetic hook to surround the current carrying conductor, and potential leads are connected as in a conventional single-phase wattmeter. In addition, a three phase balanced power measurement is made possible by the hook-on unit. This is accomplished by passing two power leads through the hook, and connecting the potential leads to these same two power leads.

The simple-switching, direct-reading scales of the new wattmeter have resulted in one-hand operation with a minimum possibility of error in use,

Network Analyzer to Be Built in Chicago

A machine which in a 25-footsquare room will reproduce the electric power network of all Illinois outside Chicago, yet consume less current than the oven of an electric stove, is to be built at the University of Illinois. It will cost approximately \$50,000, the major part of which is donated by three Illinois power companies. The machine will be 10,000cycle A. C. network analyzer. Problems it can solve include: where to place new power lines for greatest efficiency; how to prepare for emergencies when a line may be interrupted and others have to take over the load; what to do in a city to meet overload trouble.

Ball Park Lights Are Individually Aimed



The 1,318 floodlights recently installed at the Cleveland Municipal Stadium were individually aimed at predetermined points on the playing field. In the picture above one of the units on a tower high above right field is being adjusted.

New Torch Melts Metal At 3370° Centigrade

This electronic torch is so hot it can melt firebrick and even tungsten, which melts at 3370 degrees centigrade. No method has yet been devised for measuring the flame's temperature.

Developed by Dr. J. D. Cobine (below), the flame consists of nitrogen being passed through a high-frequency arc. Dr. Cobine is shown melting a quartz rod in the flame.

The arc is formed by radio waves at the extremely high frequency of one billion cycles per second, gener-



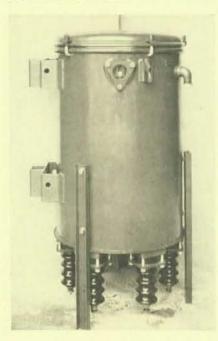
ated by a tube known as a magnetron. The tube and controls are contained in the cabinet on which Cobine is leaning.

The radio waves break up nitrogen molecules—which consist of two atoms—into individual atoms. When these atoms reunite to form molecules again, heat is released, the scientist explained.

No uses have been found as yet for the extremely hot torch, which is still at the laboratory stage of development.

General Electric Has New Capacitor Switch

A new capacitor switch, designed to replace more expensive switching devices, has been announced by the Transformer and Allied Product Divi-

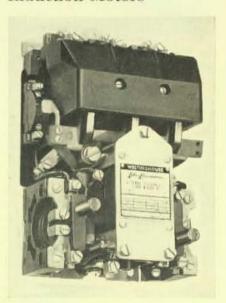


sions of the General Electric Company. Rated 15,000 volts, 100 amperes continuous, 3-phase, the switch will enable users to supply additional kilovars more economically by means of capacitors.

The B-1 capacitor switch is oilimmersed, electrically operated and constructed for outdoor use, According to G-E engineers, the new switch, designed especially for capacitors, is intended to encourage capacitor installations on high voltage circuits. The B-1 switch supplants more expensive switching devices which were used on other types of equipment as well as capacitors.

Primarily intended for pole mounting, the switch can be supplied as a component part of housed capacitor equipments if desired. It is capable of switching its continuous current (100 amperes) at 15,000 volts.

Primary Switch for Induction Motors



The new a-c magnetic, non-reversing De-ion Life-Linestarter is available from Westinghouse. Designed for either across-the-line starting of squirrel cage induction motors, or as a primary switch for wound rotor induction motors, the Life-Linestarter is said to provide complete protection of motor, machine and operator.

The starter has only one moving part, a "see-saw" lever balanced on a knife-edge bearing or center fulcrum. It cannot jam or stick, and a positive-action kick-out spring insures uniform operation. The De-ion operation principle extinguishes arcs in a half-cycle or less. Insulating parts of cold-molded inorganic material will not carbonize and are shock-resistant.

Available in NEMA sizes 0 through 4, the Life-Linestarter can be applied to all integral horsepower motors up to 100 hp. It is supplied in standard a-c voltage ratings from 110 to 600 volts at frequencies of 60, 50, and 25 cycles, for three-phase, two-phase four-wire, and single-phase operation.

The heavy gage sheet steel enclosure is coated with a baked-on gray enamel. A single screw securely fastens the cover, which can be lifted off to provide complete wiring accessibility.

Up to four electrical interlocks are available for any combination of normally open or normally closed operation. All line terminals are at the top of the starter assembly, all load terminals at the bottom providing "straight-through" wiring. Double break silver-to-silver contacts with stainless steel springs and saddle guides assure long life and accurate operation.

The combination Life-Linestarter incorporates the standard Life-Linestarter with the AB De-ion breaker.

50 Years Ago

(Continued from page 5)

newcomer may soon know more than himself and supersede him.

"Employers have found out that where all their employes are members of the same organization there is less bickering and jealousy and things run smoother.

"Fellow-eraftsmen, in conclusion I would say: It is impossible to send an organizer to every place, and I believe it entirely unnecessarv. I would remind the brethren of the fact that each one of them is an organizer of the Brotherhood. Wherever you may be by all means try to get your fellow workmen to join the organization. Always recollect that by aiding the Brotherhood you aid yourselves. To some of our high-toned unions I would say, come down a peg. Do not run away with the idea that your city or union is supreme. Only in unity is there This does not mean a strength. single city or state but the world if possible."

There was a joke column too, in the early days and Brothers if you feel there is cause to complain because of the "corniness" of the jokes in the present-day Journal, just read these:

"Sparks" from our "Live Wire"

"'Electric currents' ought to be awful good for a cake—they would make it so 'light,' you know.

"No wonder that linemen are so cold—they are continually going to the 'poles."

Then the old Journal included a column known as "Words of Wisdom" and parcelled out pieces of sound advice to the membership:

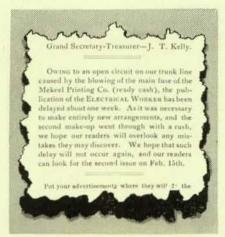
Column of Words of Wisdom

Statutes are mere milestones, telling how far yesterday's thought had traveled; and the talk of the sidewalk today is the law of the land. With us law is nothing unless close behind it stands a warm, living public opinion.—Wendell Phillips.

Violence ever defeats its own

ends. Where you cannot drive you can persuade. A gentle word, a kind look, a good-natured smile can work wonders and accomplish miracles. There is a secret pride in every human heart that revolts at tyranny.—Hazlitt.

It is an old saying that charity begins at home; but this is no reason it should not go abroad; a man should live with the world as a citizen of the world; he may have preference for the particular quarter or square, or even alley, in which he lives, but he should have a generous feeling for the welfare of the whole.—Cumberland.



Deadline woes 50 years ago

In the early days as now, the correspondence columns formed one of the most interesting and most important sections of the whole *Journal*. Here are a few excerpts from the reports of the very first press secretaries:

From L.U. 1, St. Louis, Mo. Feb. 7, 1893

"There are but few who realize the dangerous position of a lineman while at work on wires of high voltage. He climbs poles carrying a perfect net-work of wires, knowing that if he comes in contact with any of them the result will be almost certain death, either from the current or the sudden stop at the foot of the pole, or both. There are in St. Louis, and probably in all cities, linemen who have had a little experience with a grounded wire or a short circuit of high voltage, but the great majority of linemen who come in contact with such wires, are, let us hope, singing with the angels or

elimbing golden poles when the venal coroner's jury decides death by accident and exonerates the company.

"There is great difference of opinion as to what an electric shock feels like. Some say that the revolutions of the armature of the dynamo can be distinctly felt through the system; others say the surroundings look as green as the placid waters of the ocean.

"St. Louis is undoubtedly the most dangerous city in the United States for a lineman to work in. The list of fatalities is a long one. Let us hope that each member of the Brotherhood will do his work in such a manner that no blame will rest on him when the next aecident occurs. The members should also see that they keep their dues paid up so that they and their families will be entitled to all the benefits of the Brotherhood should an accident occur, which is liable at any moment.

Press Secretary.

L.U. No. 2, Milwaukee, Wis., March 10, 1893

"Mr. Editor, we want to say a word for our beautiful city of "Beer and Bricks," and her people. They are beginning to know the value of our electrical currents. Ten years ago there were numbers who would not have a telephone in their houses, because they entertained the idea it would kill them or set fire to their places; but today it is entirely different. Now they cannot get enough of our electrical currents. While, with our electric street railway, city are lights and incandescents, we are rapidly advancing to the front. With the aid of good, practical, experienced men to perform the work of construction, the public are enabled to patronize the electric currents with safety.'

F. W. SMITH, R. S.

That's all we have room for this month, Brothers, but we have a wealth of material in those old Journals, and if these excerpts interest you, we'll be glad to publish more of them. All of these excerpts appeared in Journals more than 50 years old.



(Another in our Journal Health Series)

YES, what about VD? What about those mysterious, horrible diseases that everyone knows about but refuses to talk about?

Perhaps you are surprised to find a frank discussion of the venereal diseases here in your Journal, but we believe, as do the doctors of our country and the United States Public Health Service, that the venereal diseases have been kept in the background too many years, that they have been discussed in whispers too long and that the more people know about them, the sooner and more effectively they can be cured and the more quickly will the VD toll in lives and stillbirths, crippling, insanity and blindness be diminished.

What are venereal diseases? There are five: syphilis, gonorrhea, chancroid, lymphogranuloma venereum and granuloma inguinale. Of these five, however, only syphilis and gonorrhea are prevalent and of course, the worst of the five is the killer syphilis.

In 1949, syphilis killed 13,000

people and during that same year 14,000 new cases of the disease were found in children alone. These figures, distressing as they may seem, however, are decidedly on the downgrade, In 1943, there were 592,941 known cases of syphilis (those that were reported) as compared with 1948 when only 345,-992 were reported. This is encouraging but there is still much to be done, especially since it is estimated that more than one half of the new infections go undetected. It is hoped, by a program of education and articles like this one in many of our magazines and papers, that help can be gotten to all these people and that eventually VD will be stamped out.

As we stated above the two most common venereal diseases are gonorrhea and syphilis. They are highly contagious but easily avoided. For years people did not know how to control or treat these diseases and as a result the lives of many people were shortened and made miserable by them.

There are many opinions about where syphilis came from and how it was introduced to the Western world. Most medical authorities be-

lieve that the disease was brought to Europe by the sailors who accompanied Christopher Columbus on his first voyage to the West Indies. The men were supposed to have eaught the disease from the native women on the islands and on their return spread the disease through Portugal and Spain and then throughout the continent. Others believe that the disease was already existent in the Old World, long before Columbus discovered the New World. What we do know, however, is that the disease has been spread all over the world in the past 450 years.

The strange disease acquired its name in a peculiar way. In 1530 an Italian physician named Fracastoro published an allegorical poem in Latin, all about a West Indian shepherd named "Syphilis" who was stricken by the gods with a disfiguring disease. At any rate, the name stuck and has remained till today.

Critical Signs

Now about this strange disease. Syphilis is caused by a germ, a little corkscrew-shaped organism so tiny that it would take 3,500 of them laid end to end to make an inch. This germ is called spirocheta pallida. Because syphilis is caused by a germ, it is caught when the germ passes from an infected person to one who is not infected. Syphilis is caught from infected people, usually by having sex relations with them, or through other close physical contacts such as kissing.

The syphilis germ cannot live long away from the human body so it is almost never caught from contact with door knobs or toilet seats, drinking fountains or casual contacts.

The signs of syphilis are definite.

Primary syphilis is first manifested in a sore. The sore appears in about three weeks at the point

where the germ entered the skin -usually on the sex organs, occasionally on the lips or fingers. The sore is known as a chancre (shanker). It is during this first stage that the disease is most easily given to someone else. The germs, the spirochetes, are traveling to all parts of the body through the blood stream. This first sore disappears, sometimes even without treatment. The disease then develops to:

Secondary syphilis. Three to six weeks after the first sore, a rash usually appears on the body. Sores may occure in the mouth and there may be fever, headache and sore throat. Sometimes these symptoms are so slight, they are not noticed, but the disease is very catching in this stage.

Late suphilis. For the infected individual, this can be the most dangerous stage because the syphilis germs then may attack the vital organs of the body, especially the brain, the heart and blood vessels, the spinal cord, liver, spleen and other parts of the body. Insanity, blindness, and death from heart failure frequently are results.

Not Always Revealed

The fact that syphilis, during its latent stage, can be working on the organs of the body for years without causing pain or showing any of the usual outward signs, leads many people to feel that they are free of the disease when they are not.

About 3,200,000 people in the United States have syphilis today. About 220,000 more catch it every year. It is dangerous. It can cause insanity. It can cause blindness. It can cause heart disease, It kills thousands each year in this country. Babies often eatch syphilis before they are born if their mothers have the disease. Syphilis can cause miscarriages, dead babies, or crippled, sickly and insane children.

That's the dark picture of what syphilis, if allowed to go untreated, can do to a man and a woman and their innocent children. But there is a brighter side.

Sure Tests

Of course the best way to avoid syphilis is to avoid sexual relationships outside of marriage. Since the Wassermann test is a prerequisite to obtaining a marriage license in most states, persons contracting marriage, find out whether or not they have a venereal disease and can then submit to rapid treatment for their cure and the protection of the

However, once a person thinks he has been exposed to syphilis, he should see his own doctor or visit a clinic at once. Many people have syphilis and do not know it -only a doctor can tell.

The doctor will examine the suspect carefully. He will make a blood test which is easy and painless. If it is positive he will recommend treatment at once and practically every case of syphilis can be cured if treatment is begun early. And the wonderful part about treatment today, is, that with the discovery of penicillin, cure treatment for syphilis that used to take 18 months with arsenic and bismuth, was dangerous and not always effective, can now be completed in two short

weeks, and is nearly always 100 percent successful. These treatments can be administered by private doctors, by a local hospital or by health department clinics which are set up all over the United The treatment in local States. health department clinics is free for those who cannot afford to pay.

Now about that other partner in VD-gonorrhea, the commonest of all the venereal diseases. It is not the same as syphilis. It is an entirely different disease caused by a germ called the gonococcus. but like syphilis it is caught through sexual relations and each year more than a million people become infected with it. It is never caused by lifting heavy objects or from strains as some people think.

Symptoms of Gonorrhea

The first symptoms of gonorrhea appear one to eight days after a person catches the disease. Any unusual discharge from the sex organs may be a sign of gonorrhea. Another early symptom is a burning sensation accompanying urination. These symptoms are quite pronounced with men but may not be present in women, and only a doctor can diagnose gonorrhea accurately. It may start very mildly and sometimes may not do serious damage to the person who has itbut if not treated, it may cause great damage and pain in the sex organs. It may attack the heart, It may settle in the joints and cause rheumatism or arthritis. If the gonorrhea germ gets in the eyes it may cause blindness. Untreated gonorrhea often causes sterility and is often one reason why men and women cannot have children.

Serious outlook isn't it? But again the cure is so effective and so simple and painless. Now gonorrhea can be cured in a matter of hours in a doctor's office or at a local clinic. Sometimes it takes only a single shot of penicillin to rid a patient of this erippling. painful disease.

We have mentioned in this discussion the effect that venereal disease can have on children. Syphilis among adults is caught from

(Continued on page 68)

Safety Posters Available

The safety covers being run monthly in your Journal are now being reprinted on heavy cardboard for the use of our local unions.

We recommend that they be placed in a prominent spot in the local union hall, plants and shops to remind our members to "Work Safely,"

Safety covers for the last three months and the one in the current issue are now available free of charge and additional posters will be available monthly as the Journal is printed.

Write, specifying number of posters desired, to:

J. Scott Milne, Editor,

Electrical Worker's Journal 1200 15th Street, N.W., Washington 5, D.C.

Somebody's Little Boy

Somebody's boy was crossing the street, Innocent, young and fair, He hadn't the judgment of older folks, He didn't see danger there. Somebody's boy had a song on his lips.

But it died in an instant away,
For a motorist ran the little boy down,
And he died at the close of the day.
Somebody kneels by an empty bed,

And fondles a little shoe, Somebody looks through the empty

years,
Suppose this somebody were you?
Will you not watch for the little boys,
Drivers in city and town,

Really, it's one of the greatest crimes, To run a little boy down.

J. W. GOODWIN, L. U. No. 835.

Navy Influence

It's obvious that all instruction books Will have to be re-written; On how to fix the OCB's They are chuck full of printin: I used to know what a grid stack was And about the "Tripping Trigger", And why the toggle stop was set At a plus or minus figger. The book says "Grease the closing cam" And check the pins and cotters, See that dash pots check OK And run oil through the blotters. Hand the grounds and check the bus Are listed in "Suggestions" We used to follow these helpful hints Without the thought of questions. But now when the job is all complete And the maintenance sheet turned in, You'd think we repaired a battleship; Here's how the reports begin. Up in the "as found" column Listed in true navy slang, An oil leak on the "starboard" side And under the "fantail" overhang. Operator "bulkhead" bolts were tightened

And the forward "turret" checked:
"Hatchway" cover bolts removed
And slippery floors were "decked".
The kickoff springs were hanging "aft",
Were found to be "secure".
The "bilge pumps" checked and residue
Were "dumped" into the sewer.
Tank walls "swabbed" with clean white
rags

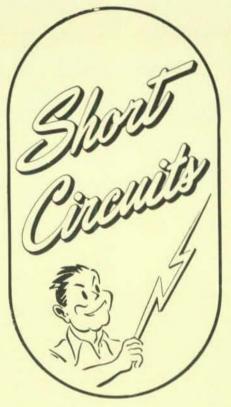
And bushings "polished" bright.
Then all the "gear" and tools removed
And covers "battened" tight.
The counter number I could read,
But the time the "release" was given
Was several hundred more or less
When actually it was seven.
But after all what's in reports
Is not what really counts,
It's leaving the job in tip-top shape,
The sloppy jobs sure bounce.
So if my headaches just consist
Of ex GI's dispatches,
I'll try to take them as they come
Until a new one hatches.

KEN CALKINS, L. U. No. 125.

The Reward

Six-inch conduit, grease, lead cable Bull gang, pull, winch, dirty man hole Sweat, swear, dog off when your able. Scrambled sum spells big bankroll.

ERNIE BRANT, L. U. No. 136



Short Circuits

Short circuits pop, the fuse is blown The foreman blows his top The owner's gripe non-union men hop Short circuit is on a throne.

Now turn the Journal pages—stop And smile for there is shown Short Circuits that are a crop I.B.E.W. members have sown.

> ERNIE BRANT, L. U. No. 136

Monkey Shines

(International Representative C. H. Rohrer has sent us the following verses (author unknown) for publication on the 'Short Circuits' page. He says it certainly does take some of the vgo out of mankind.)

Three monkeys sat in a coconut tree Discussing things as they're said to be Said one to the others "Now listen, you two.

There's a certain rumor that can't be true:

That man descended from our noble race.

The very idea is a disgrace.

No monkey ever deserted his wife,
Starved her babies and ruined her life
And you've never known a mother monk
To leave her babies with others to bunk
Or to pass them from one to another
"Til they scarcely know who is their
mother

And another thing you'll never see;
A monk build a fence 'round a coconut
tree

And let the coconuts go to waste, Forbidding all other monks a taste. Why, if I'd put a fence 'round a coconut tree

Starvation would force you to steal from me.

Here's another thing a monk won't do-

Go out at night and get on a stew Or use a gun or club or knife To take some other monkey's life. Yes, man descended, the ornery cuss But brother, he didn't descend from us."

. .

A Hamfest

I was asked to go to a hamfest And I thought that meant eating ham; But to my surprise I soon found out, Just what a dummy I am.

The hams at this fest were all human, And not the four-legged kind; The one interest they all had in common Is transmitting just what's on their mind.

It was a da-dit-da on one hand, And a dit-dit-dit-da on another; Or a Cw fan a arguing With a phone band man, Oh Brother.

How's you grid drive in your final? How's you power supply holding up? You got a QSL from Russia? Boy, you sure are a lucky pup.

I'm using an old folded diapole, Not me, boy, I've got a beam; Well now me, I'll stick to a longwire, For the calls come in like a dream.

How's everything up on 80? I don't know, I'm on 75; Not me, I'm strictly a 10 man, Say that band's more dead than alive.

What'll ya swap for some 304 TL's? Say, pal, you can't give 'em away; Someone hollered "Let's eat," boy what a treat.

It was the first thing I understood all day.

W. S. Gallant, B.M. and F.S., L. U. No. 191

The Unemployed

He's caught in the grip of man-made grief,

On the brink of calamity cruelly thrown;

The force that cuts his income's source Was brought about by no fault of his

The hands that have woven the worldly wealth

Are searching for working chores again,

The toil-calloused fingers are seeking to earn

A meager living, but all in vain!

He struggles in threes of trying times That deprive his dearest of daily bread:

He dies a thousand deaths to watch
The sorry sight of his loved ones
unfed.

Will they who are steering industry's wheels

Revise and alter their awkward ways? Will they forsake short-sighted views And adopt a plan that truly pays?

The larger the payrolls of those they employ,

The greater the benefits all enjoy!

A Bit o'Luck, ABE GLICK L.U. No. 3.

New Electronic Computer Shown

The latest of a number of postwar high-speed electronic computers, claimed to be faster, simpler and more versatile than any of its predecessors, was shown to the public last month by the National Bureau of Standards, which built it for the Air Force at an approximate cost of \$250,000.

Called SEAC by the Bureau (an abbreviation of Standards Eastern Automatic Computer), the machine was designed and constructed in 20 months, which Dr. Edward Condon, director of the Bureau, said was an "amazingly short period of time, considering the complexity of the machine."

Phenomenal Speeds

A Journal reporter, who saw the machine demonstrated at the Bureau's materials testing laboratory, concurs that the computer is complex. And it did not seem less complex after two experts had "explained" its operation. The machine multiplies or divides elevendigit numbers in 250 one-millionths of a second, and performs 5,000 additions, subtractions, or comparisons each second. How the Air Force will utilize this phenomenal speed was explained at the gathering by Lieut, General Edwin W. Rawlings, deputy chief of staff. Used in conjunction with conventional punched card computing equipment, the general said the machine had enabled the Air Force to compute in a few months, program and requirements data which formerly required years to develop by normal staff procedures.

Dr. Condon said, "I think we are now entering into a new era in the tool-building development of mankind. This is to be an era marked by the rapid and large-scale development of machines which will relieve men's minds of many routine and fatiguing chores in the same way that the machines of the past have relieved our muscles of routine and fatiguing chores."

Failures of operation are infre-

quent, and only three failures have been due to failing vacuum tubes, of which 900 are used in the computer. The real "gremlins" are found in the more than 100,000 soldered connections.

For the technically-minded, the JOURNAL prints the following official description of the computer, as given by the Bureau of Standards.

Description of Computer

SEAC has four main sections: an input-output unit, a "memory" unit, a control unit, and an arithmetic unit. The input-output unit is the link between the machine and its operators: here information and instructions are fed in and answers are printed out by the machine automatically. The "memory" unit is a file for storing instructions and numbers for use as needed by the machine in solving a given problem. The control unit directs the flow of information within the computer. Electrical pulses serve as control signals. The control unit continually refers to the "memory" for instructions in the proper sequence. The arithmetic unit carries out the actual computations which the control unit directs it to perform. When the arithmetic unit has arrived at the solution required, the control unit senses this and orders the "memory" to send the answer to the output, where it is printed out.

SEAC performs seven basic operations: addition, subtraction, multiplication, division, comparison, logical transfer, and input-output control. The comparison and logical transfer operations give the computer attributes akin to initiative and judgment. For example, SEAC can modify its instruction, ascertain if it has made errors, determine when it has computed results to predetermined accuracy, and refrain from printing out incorrect answers. In fact, SEAC can do many things which one normally associates with the exercising of mental faculties.

Arithmetical Operation

SEAC can add or subtract sets of eleven-digit numbers—e.g., 87,956,-953,719—at the rate of 1100 times per second. It multiplies and divides such numbers at the rate of 330 times per second.

These rates include the time for the machine to search the memory for the numbers, operate upon them, and return the result to the memory. Addition or subtraction alone is completed in 50 one-millionths of a second. Multiplication or division alone is completed in 250 one-millionths of a second.

Instructions and numbers are sent in code at the rate of 1,000,000 pulses per second. This unusually high pulse rate is the key to SEAC's speed —as well as its large, fast memory.

SEAC's Memory

In any computer, the capacity and speed of its memory determine the limits of difficulty for the problems it can solve. SEAC's memory is both

(Continued on page 66)

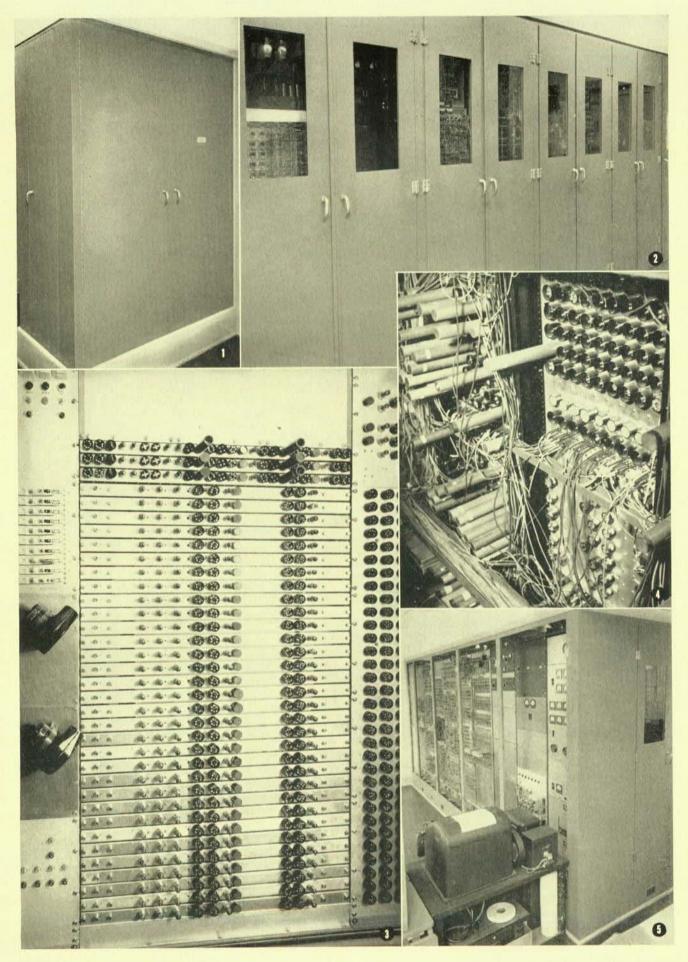
Fig. 1. The SEAC's serial memory unit is completely contained in this cabinet. Information is stored by the memory in the form of supersonic waves traveling through glass-enclosed columns of pure mercury. Sixty-four of these mercury acoustic delay lines provide a storage capacity of 512 words with an access time of 168 microseconds.

Fig. 2. Rear view of main SEAC unit.

Fig. 3. One side of the SEAC's serial memory unit with cabinet door opened to show construction details. Half of the serial memory unit appears here: 32 recirculation amplifiers, each employing two 6AK5 and three 6AN5 miniature electron tubes, are mounted in front of their associated mercury acoustic delay lines. The three distinctive units at the top of the center array are selection generators which when signalled by the control unit pick out the proper acoustic channel and send driving signals to the access circuits at right. Indicator lights for the temperature-control system appear at the extreme upper left.

Fig. 4. Interior view of a section of the main SEAC unit showing the tube-base-mounted germanium-diode clusters used as high-speed electronic switches. The long fiber tubes enclose short lengths of continuously-wound electrical delay lines. The flexible insulated wires interconnect the SEAC's pulse circuits.

Fig. 5. A view of the SEAC with operator's control table. Power-supply control and meter panels are directly accessible. The teletype keyboard and printer are used for direct input and output.

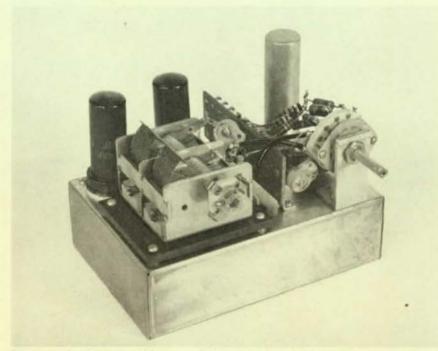


Journal for September, 1950

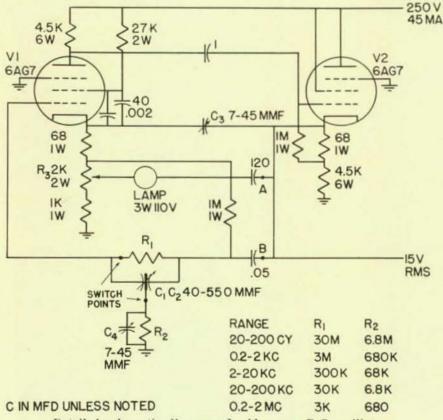
Page Thirty-nine

New Wide-Range R-C Oscillator

A resistance-capacitance oscillator with many immediate applications in radio and electrical work has been developed at the National Bureau of Standards, Washington, D.C. The new oscillator covers, in five steps, the frequency range from 20 cycles to 2 megacycles. Combining simplicity and compactness with excellent frequency stability over a wide tuning range, it has several advantages over previous R-C oscillators. In



Photograph of new wide-range R-C oscillator developed at the National Bureau of Standards.



Detailed schematic diagram of wide-range R-C oscillator.

older models the top frequency is about 200 kilocycles; in the new R-C oscillator, a single amplifier driving a cathode follower provides wide-band operation with small phase shift, low output impedance, and constant output voltage.

The oscillator circuit has two feed-back paths: a regenerative cathode-to-cathode loop, and a degenerative cathode-to-grid loop which includes a bridged-T network. Oscillation occurs at the frequency of minimum degeneration. The 15-volt output remains constant to within one decibel at all frequencies, and the output waveform is essentially undistorted. By proper shielding to prevent synchronization with the power-line frequency, the R-C oscillator may be mounted in the same small cabinet with a power supply and an output amplifier.

Surge Testing

(Continued from page 27)

When no fault is present the potential at B₂ will be the same for both directions of travel of the test surge. If a fault is present it will absorbenergy before the surge reaches B₂ for one direction of travel, resulting in a trace on the cathode ray tube of lower value for one direction than for the reverse direction. Since the eye has persistence of vision and the surges repeat sixty times a second, "two" curves appear on the tube screen when a fault is present, while there is only one image when the winding is good.

By variation in connections, threephase motor windings may be tested by comparing one phase with another.

The Engineers

(Continued from page 15)

children and grandchildren to look at after we're gone. Belonging to the union makes it worth while too," he added. "We've got good wages and conditions, thanks to them."

That's the spirit of the operating engineers and they will go far. Wherever America builds, there will be members of the I.U.O.E. helping her to build and grow.

We wish to express our appreciation to Mr. F. A. Fitzgerald, Mr. Charles B. Gramling and Mr. Hunter P. Wharton of the I.U.-O.E. headquarters office and to Miss Sallie Murray and Miss Lottie Noland of the office staff, without whose help in providing us with background material, this article could not have been written.

Scientific STAN

Pollen grains from different plants vary physically and chemically.

The helicopter has a new use; an aircraft of this type was recently used to detect whales in the Pacific Ocean.

The standard Army field hospital unit is being redesigned to make it lighter, less cumbersome, more useful and better adapted to air transportation.

Nine-year old cars, or older ones, in Rhode Island are classified as "jalopies" by the State Registry of Motor Vehicles and will not be registered without inspection.

Theoretically every material containing carbon may be a source of synthetic fuel; practically there are only a few kinds of suitable raw materials for this purpose; notably coal, natural gas and bituminous shale.

Crickets are the best known of all insects in respect to their response to temperature changes and one is known as the temperature cricket; the temperature is the number of chirps made in 14 seconds with 40 added, a scientist recently said.

All mammals require vitamin A in their diet.

The Marshall Islands in the Pacific is the birthplace of the typhoons of the West Pacific.

Dairy cows, feeding on green pastures, consume large quantities of vitamin A and give milk of higher vitamin A content.

Scientists know three kinds of hydrogen: the ordinary kind, a heavy hydrogen known as deuterium, and a heavy, heavy kind called tritium.

Airplanes of a few decades ago with propellers in front to pull the craft through the air were called "tractors" in contrast with earlier "pushers" which had propellers to the rear.

Calcium and magnesium salts are the principal causes of hard water; these minerals react with soap to form a curd that sticks to most anything being washed.

The marked improvements in lighting, cooking and heating equipment in American homes are responsible for cutting the female death rate from burns and scalds to less than half that of 15 years ago.

Kankakee, Ill., claims to have the brightest lighted street in the country.

Vicara is a new fabric made from zein, a protein fiber produced from corn.

The fragrance of roses varies among different species and even among different varieties within a species.

Twenty-six American states have, or have recently had, survey commissions to study reorganization of state governments.

More men and boys are killed by lightning than women and girls because the males are more apt to be outdoors in dangerous places.

An alcohol called sorbitol tends to control the moisture content of materials with which it is mixed; it slows evaporation in dry weather and absorption under humid conditions.

Airplanes in the air can receive the high frequency radio waves used by television and FM broadcasting at greater distances than ground receivers because there are no obstructions in the paths of the waves.

Whole milk contains approximately 0.12% calcium.

There are said to be over 29,000,000 electrically-operated washing machines in American homes.

Seagulls are not ocean birds entirely; they are found in the Great Lakes region and also at the Great Salt Lake, Utah

In spite of the increasingly large amount of natural gas being used, new reserves are being discovered rapidly.

The two most dangerous places in a house from the fire-hazard standpoint are the basement and the kitchen. The number of prefabricated houses built during the first half of the present year is nearly as great as the number built during the entire preceding year.

Irish moss, a seaweed found on the coast from Massachusetts north, yields a gelatinous material called carrageenin, one use of which is to keep cocoa suspended in chocolate milk.

Rivers of the Ohio River Valley carry heavy pollution: the drainage basin includes over 200,000 square miles of area, has a population of some 19,000,000 and thousands of industrial plants.

There are now over 500,000 chemical organic compounds.

Color photographs are better for wartime camouflage detection than blackand-white ones.

Chemical weed-killers have been used for several years; now there is a chemical which kills crabgrass in the lawn.

There is sufficient timber on the Tongass National Forest in southeastern Alaska to supply five or six large pulpmills indefinitely.

Ammonia is made in the oil industry using the hydrogen obtainable from the high-temperature cracking of natural or refinery gas and nitrogen from liquid air.

There is no evidence that what is known as corn in America was grown in any part of the Old World prior to the discovery of the Western Continent by Columbus.

Fishery research laboratory, a Federal government building just completed in Hawaii, will be the center of investigations relative to high seas fisheries of the Territories and Island Possessions.

The chemical composition of petroleum is extremely complex.

Comfort under weather conditions depends on temperature, humidity and the velocity of the wind.



"Where do I find an electric eel?"

WAYNE KENDRICK & COMPANY CERTIFIED PUBLIC ACCOUNTANTS RUST BUILDING WASHINGTON 5, D. C.

July 26, 1950

International Executive Council
International Brotherhood of Electrical Workers
Washington, D. C.

Gentlemen:

We have examined the accounts and records of the International Brotherhood of Electrical Workers for the year ended June 30, 1950, and submit herewith the following exhibits and comments:

Exhibit "A" - Balance Sheet
As at June 30, 1950.

Exhibit "B" - Statement of Cash Receipts and Disbursements For the Year Ended June 30, 1950.

COMMENTS

Cash on deposit was reconciled with balances verified by direct confirmation with the depositories. Undeposited receipts were traced into the banks in subsequent deposits.

This report does not distinguish between United States and Canadian dollars.

All stocks and bonds were verified by direct correspondence with American Security and Trust Company, custodian. All notes were verified by inspection. We did not attempt to ascertain the sufficiency of value of the real estate or collateral securing the notes receivable.

Advances and deposit were checked with the detailed accounts, but were not further confirmed.

Furniture and equipment is stated at cost less proceeds of furniture and equipment sold and reserve for depreciation.

No funds collected from contractors for the payment of pensions are included in this report as such funds are controlled by trustees in accordance with the Employers' Benefit Agreement and are not includable in the accounts of the International Brotherhood of Electrical Workers.

The report is prepared on a cash basis and does not reflect prepaid or accrued items.

We examined the method of recording receipts and made test-checks of various transactions. All disbursements were checked to supporting vouchers and to canceled checks signed by the secretary and the treasurer.

Respectfully submitted,

WAYNE KENDRICK & COMPANY

By Nayne Kendrick

Certified Public Accountant

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS WASHINGTON, D. C.

WASHINGTON, D. C. BALANCE SHEET AS AT JUNE 30, 1950 ASSETS

ASSETS		
CASH (See Footnote) On Deposit Undeposited Receipts Returned Checks Office Fund	\$ 941,689.47 39,919.01 2,648.60 50.00	\$ 984,307.08
INVESTMENTS (At Book Value) Stocks Bonds Notes Receivable Secured by Collateral Notes Receivable Secured by Real Estate	\$ 337,591.72 7,199,212.60 534,250.00 4,577,562.62	12,648,616.94
ADVANCES AND DEPOSITS FURNITURE AND EQUIPMENT (NET) (See Comments)		5,851.00 82,310.52
TOTAL ASSETS		\$13,721,085.54
FUND ACCOUNTS AND ALLOCATED AND UNALLOCATED COLLECTIO	NS	
FUND BALANCES		
Convention Fund Death Benefit Fund Defense Fund	\$ 492,563.82 602,023.21 616,698.00	
General Fund Allocated to Employees' Death		
Benefit Fund	5,608,918.56	
Pension Benefit Fund	5,138,532.90	\$12,458,736.49
ALLOCATED COLLECTIONS AWAITING DISBURSEMENT Railroad Unemployment Tax—System Councils Railroad Retirement Tax Withholding Tax Miscellaneous Premiums Due to Electrical Workers' Benefit Association	\$ 255.19 13,062.39 12,994.90 505.27 68,591.20	95,408.95
UNALLOCATED COLLECTIONS Current Receipts Awaiting Allocation to Proper Accounts	\$ 1,162,062.56 4,877.54	1,166,940.10
TOTAL FUND ACCOUNTS AND ALLOCATED AND UNALLOCATED COLLECTIONS		\$13,721,085.54
NOTE: Canadian dollars in the amount of \$148,266.07 are included in cash at face value.		
cash at face value.		EXHIBIT "B"
STATEMENT OF CASH RECEIPTS AND DISBURSEMEN' FOR THE YEAR ENDED JUNE 30, 1950	rs	
CASH BALANCE JULY 1, 1949 Add: CASH RECEIPTS		\$ 1,858,542,60
Receipts Allocated During Period	as transmission on	
Per Capita Initiation Fees Emblem Sales "Electrical Worker" Sales Reinstatement Fees Returned Treasuries Supplies Sales Income from Investments	\$ 4,799,778.40 522,437.45 17,787.36 109,50 8,153.75 1,781.08 38,267.48	
General Fund \$ 119,596.82 Pension Benefit Fund 126,504.21	246,101.03	
Book Value of Bonds Sold or Redeemed	1,924,995.25	

Profit on Sale of Bonds Prepayment Fees on Collection of Notes Receivable			\$2,821.48	
			578.50	
Secured by Real Estate				
Collections on Notes Receivable Secured by Real Estate			850,650.16	
Collections on Notes Receivable Secured by Collateral			797,140.00	
Sale of Old Furniture and Equipment			1,161.16	
Received from Contractor Erecting Building for 1500 Massachu-				
settes Avenue, Inc. in Accordance with Agreement of June 20,				
1950, and Applied to Cost of Stock of That Corporation			136,351.00	
Special and Overtime Assessments			139.82	
Railroad Unemployment Tax—System Councils			263.60	
Electrical Workers' Benefit Association Premiums and Special				
Assessments Collected			2,947,514.40	
Family Group Collections			8,223.65	
Refund of Loans and Advances			4,129.34	
District of Columbia Sales Tax Collected			12.61	
			606.91	
Income from Vending Machines				
Contributions to Pension Benefit Fund			45,547.90	
Cancellation of Old Pension Checks			100.00	
Sale of 1948 Convention Proceedings			4.00	
Accumulated Balances of Unallocated Collections Allocated to				
Pension Benefit Fund			30,000.00	
Refunds of Legal Expense			7,892.28	
Refund of 1950 Convention Expense			320.84	
Refunds of International Office Supplies Expense			4,612.90	
			\$12,397,481.85	
Add:			4.25001,1202100	
Increase in Unallocated Collections			628,075.68	
Increase in Chanocated Conections			020,010.00	
momal Cacil Discripted				010 005 555 50
TOTAL CASH RECEIPTS				\$13,025,557.53

TOTAL CASH ACCOUNTABILITY (Carried Forward)				\$14,884,100.13
Deduct:				
Deduce.				
CASH DISBURSEMENTS				
CASH DISBURSEMENTS General Fund				
General Fund				
General Fund Per Capita American Federation of Labor	\$	118,800.00		
General Fund Per Capita American Federation of Labor	\$	118,800.00 13,500.00		
General Fund Per Capita American Federation of Labor Building and Construction Trades Department	\$	13,500.00		
General Fund Per Capita American Federation of Labor	\$	13,500.00 9,000.00		
General Fund Per Capita American Federation of Labor	\$	13,500.00 9,000.00 9,060.00		
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department	\$	13,500.00 9,000.00 9,060.00 2,400.00	\$ 156,260,00	
General Fund Per Capita American Federation of Labor	\$	13,500.00 9,000.00 9,060.00	\$ 156,360.00	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada	\$	13,500.00 9,000.00 9,060.00 2,400.00	\$ 156,360.00	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions	\$	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00	\$ 156,360.00	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor	\$	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00	\$ 156,360.00	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions	\$	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00	\$ 156,360.00	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department	60	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00	\$ 156,360.00	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department	\$	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34	\$ 156,360.00	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department	**	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80		
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department	\$	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60	\$ 156,360.00 8,905.12	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada	85	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80	8,905.12	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange	*	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80	8,905.12 651.03	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims	60	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80	8,905.12 651.03 12,600.00	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense	60-	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80	8,905.12 651.03 12,600.00 472,684.10	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense	95	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80	8,905.12 651.03 12,600.00 472,684.10 14,765.82	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers	85	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense	90	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80	8,905.12 651.03 12,600.00 472,684.10 14,765.82	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses		3,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80 957.50	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage	40	13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80 957.50	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53	
General Fund Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses		3,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80 957.50	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc.		13,500.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80 957.50	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office		3,550.00 9,000.00 9,060.00 2,400.00 3,600.00 3,521.88 2,223.34 1,317.60 884.80 957.50	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education Other		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education Other Investment Expense		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95 39,932.45 2,900.34	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education Other Investment Expense International Office Supplies		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95 39,932.45 2,900.34 101,434.92	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education Other Investment Expense International Office Supplies Insurance		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95 39,932.45 2,900.34 101,434.92 6,104.70	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education Other Investment Expense International Office Supplies Insurance Council on Industrial Relations		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95 39,932.45 2,900.34 101,434.92 6,104.70 4,384.98	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education Other Investment Expense International Office Supplies Insurance Council on Industrial Relations Local Union Supplies		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95 39,932.45 2,900.34 101,434.92 6,104.70 4,384.98 64,419.53	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Union Label Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education Other Investment Expense International Office Supplies Insurance Council on Industrial Relations		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95 39,932.45 2,900.34 101,434.92 6,104.70 4,384.98 64,419.53 961,991.14	
Per Capita American Federation of Labor Building and Construction Trades Department Metal Trades Department Railway Employees' Department Union Label Trades Department Trades and Labor Congress of Canada Conventions American Federation of Labor Building and Construction Trades Department Metal Trades Department Union Label Trades Department Trades and Labor Congress of Canada Exchange Death Claims "Electrical Worker" Expense Emblems Expense Expense—International Officers Express, Freight, Drayage, and Postage General Expenses International Vice-Presidents' Offices Miscellaneous Expenses Dues, Subscriptions, Publications, Etc. Auditing—International Office Contribution to Labor's League for Political Education Other Investment Expense International Office Supplies Insurance Council on Industrial Relations Local Union Supplies		3,521.88 2,223.34 1,317.60 884.80 957.50 3,853.71 2,965.02 2,450.00 15,910.72	8,905.12 651.03 12,600.00 472,684.10 14,765.82 138,029.53 21,196.95 39,932.45 2,900.34 101,434.92 6,104.70 4,384.98 64,419.53	

Refunds Vending Machine Merchandise Rent and Light Railroad Retirement Tax Railroad Unemployment Tax				\$685.31 346.30 56,447.57 51,821.75 2,255.41	
Salaries					
Employees International Officers Representatives Railroad Retirement Tax, Withholding Tax, Union Du	es, and	\$	349,448.11 177,120.00 867,093.70		
Group Hospitalization not Remitted as at June 30, 19	949		24,608.02		
			A SE AN ORDER OF THE SE		
Railroad Retirement Tax, Withholding Tax, Union Dues, and Group Hospitalization Not Remitted as at June 30, 1950	6,085.59 762.00	\$ 1	,418,269.83 26.847.59	\$ 1,391,422.24	
		-		4 apostranos	
Telephone and Telegraph	* * 5.9 (* 9) *			43,643.24	
Total General Fund Disbursements				\$ 3,588,599.03	
Convention Fund					
Refunds	* * * * * *			67.09	
Death Benefit Fund					
Death Claims		\$	63,650.00 42.00		
Total Death Benefit Fund Disbursements				63,692.00	
Defense Fund					
Legal Expense			66,662.48 30,06		
Total Defense Fund Disbursements				66,692.54	
Pension Benefit Fund					
Pensions—Canadian Members		s	133,650.00		
Per Capita Tax Paid		107	107,377.30		
Investment Expense			10,432.51		
Refunds			915.40		
Total Pension Benefit Fund Disbursements	* * * * * * *		477	252,375.21	
Other Disbursements					
Purchase of Furniture and Equipment		\$	17,555,54 266.95		
Assessments Paid		2	,885,131.90		
Family Group Collections	* * * * * * *		7,965.10		
Purchase of Bonds					
Face Value		1	,000,000,00		
Premium Written-Off as Expense			412.64		
Accrued Interest			141.78		
Purchase of Notes Receivable Secured by Collateral			,232,950.00		
Purchase of Notes Receivable Secured by Real Estate	*****	4	,321,606.15		
Accrued Interest on Notes Receivable Purchased			1,735.45		
Purchase of Stocks (Includes \$136,351.00 Received from Control Erecting Building for 1500 Massachusetts Avenue, I	nc., and				
Used to Purchase Stock of That Corporation, in Acc	cordance		459.050.50		
With Agreement of June 20, 1950)	*****		453,058.72 4,029.34		
District of Columbia Sales Tax Remitted			13.61		
Increase of Postage Deposit			3,500.00	e 0.000.007.10	
Total Other Disbursements				\$ 9,928,367.18	A10 000 F00 4
TOTAL CASH DISBURSEMENTS					\$13,899,793.05
CASH BALANCE JUNE 30, 1950					\$ 984,307.08

On Deposit

American Security and Trust Company, Washington, D. C.				
Voucher Account Payroll Account Special Account Pension Benefit Fund Account Pension Benefit Fund Agency Account Agency Account	\$ $\begin{array}{c} 445,855.44 \\ 100,000.00 \\ 5,000.00 \\ 108,519.19 \\ 22,337.01 \\ 112,402.66 \end{array}$	\$ 794,114.30		
The City Bank, Washington, D. C.	1			
Pension Account		250.00		
The Royal Bank of Canada, Montreal, Quebec, Canada				
Voucher Account	\$ 115,994.77			
Pension Account	15,000.00 16,330.40	147,325,17	\$	941,689.47
Undeposited Receipts				
Deposited in American Security and Trust Company, Washington, D. C.—Voucher Account, During the Month of July, 1950 Deposited in American Security and Trust Company, Washington,		\$ 16,190.01		
D. C.—Pension Benefit Fund Account, During the Month of July, 1950		22,788.10		
Canada, Voucher Account, During the Month of July, 1950		940,90		39,919.01
Returned Checks				2,648.60 50.00
TOTAL			s	984,307.08
NOTE: Transactions in Canadian dollars are included in this exhibit				

Problems of a Trip to Moon

at face value.

W HAT MIGHT take place during lunch aboard a space rocket beyond the earth's gravitational pull, was recently described by Ernest G. Reuning, astronomer of the U.S. Naval Observatory in Washington.

"At the very start the passengers would be quite uncomfortable," he said. "The acceleration for the first few minutes would have to be several times that of gravity.

"At four G's, (four times ordinary gravitational pull,) a 180 pound man would feel like 720 pounds and his bones and muscles would certainly ache."

After the rockets were turned off, there would be no gravity at all . . . no up and down, in other words, he said. Everybody would be floating, unless they had magnetic shoes to hold them to the floor or walls.

Passengers on the first moon

flight would be more than compensated for their discomfort, however, by being the first humans to see the earth floating out in space as a huge, multicolored sphere, he said.

Ruening declared he would risk his neek anytime for the privilege of seeing the craters and mountain ranges of the moon closer than he's seen them in his telescope.

This, however, is nothing that need concern most of us for the present, he admitted. A small problem called "massed ratio" is the chief stumbling block to travel in space.

This bugaboo is the ratio of weight of the rocket filled with fuel to its empty weight. In order to escape the earth's pull, a single-stage rocket like the V-2 "would have to be so flimsy to earry the necessary amount of fuel that it couldn't withstand the trip."

To get a 50-ton rocket to the moon and back carrying only a 20-pound payload, about 250,000 tons of fuel would be needed. Such a rocket would actually be six rockets in one. Three of the rock-

ets, burning consecutively, would be needed to push it to the moon and three to get it back.

Without rockets to check its return to the earth, the rocket would become a meteorite and crash at 25,000 miles per hour.

Microwaves Utilized As Communication Means

Microwaves used for communication between a generating plant of the Pennsylvania Electric Company at Seward, Pa., and an important substation 12 miles away are re-directed around a hill by a 20-foot-square aluminum sheet. Microwaves travel in straight lines much like television signals.

Since there was no direct line of sight between the two stations, a mountain top was located visible from both locations where an aluminum reflector could be mounted that would redirect the microwaves much as a mirror reflects light. Perforations in the sheet reduce its wind resistance without impairing its efficiency.

Because microwaves have a wave length of about one foot, and the openings are only one-inch wide, the waves do not pass through. The system operates in both directions.

Local 1 Has Over 6.000 at Its Picnic

L. U. 1, ST. LOUIS, MO.—Local No. 1 members and friends attended the largest picnic in 10 years with the clocking of more than 6000 men, women and children. Excellent arrangements were made for parking cars, using one whole picnic grove for autos and the other grove took care of the picnickers.

There were many out-of-towners from various locals present even from as far as Kansas City Local No. 124 which brought its apprentices to challenge Local No. 125 exprentions in a

lenge Local No. 1's apprentices in a game of baseball. Local No. 1 was the victor, 13 to 9. We enjoyed the fine fellowship and sportsmanship and hope to have return engagements perhaps in Kansas City at a later date.

The thirsty crowd consumed 91 half barrels of St. Louis' finest beer, several hundred cases of soda, one truck of ice cream and gallons and gallons of water. Members' children under the age of 12 were given free tickets for rides, soda, and ice cream. Two tickets were sent to each member for attendance prizes.

The Electrical Memorial Post No. 377 of the American Legion made arrangements for a big barbecue for those who did not care to pack basket lunches. Proceeds are to be used for assistance of the needy members who are members of the I.B.E.W.

There were games for young and old. Attendance prizes were union made electrical appliances.

Every one had a swell time with very orderly attendance. It was a



grand day with plenty of that old Missouri sunshine. Most of the old members were at the picnic. A number of members from Local 309 visited as they always do. The Four Horsemen from Miami were there: Chris Fagan, John Hunter, K. "Dug" Dugger, and Arint Tederson.

Then came the dancing and young and old cut many rugs, and JUST CUT-UP.

M. A. "MORRY" NEWMAN, The Lover of Light Work.

Get Out the Vote, New York Local Urges

L. U. 3, NEW YORK, N. Y.—On September 4th we will again celebrate Labor Day. Last year this time we had hoped that when another year had passed we would be able to celebrate the repeal of the Taft-Hartley Law or at least the repeal of some of its most noxious sections. It was mostly wishful thinking because it was hoped that the fall elections would strongly indicate, by the election of liberal candidates rather than

candidates that have the National Association of Manufacturers do their thinking for them, that Congressmen who went along on the T-H bandwagon would hop off before they were bounced off.

Unfortunately the elections were not decisive enough to bring about this result. This year we have a chance to really do something to correct this situation on election day as the whole House of Representatives and many Senators are up for election. We can only do this if every union man or woman and their relatives and friends not only register so that they may be eligible to vote but also get out on election day and not only vote themselves but see to it that their families and friends get to the polls too.

Most of those that support the T-H Law are to blame for our troubles in Korea because they voted against necessary appropriations to supply the Koreans with necessary equipment. To cover their own shortcomings they are throwing all sorts of brickbats at President Truman and Secretary of State Acheson. Why do so many feel that politics is a "dirty game" and that it must be played "dirty? There can be honest rivalry and difference of opinion without the opponents dragging each other through mire. Political propaganda today is full of half truths and misstatements. Congressmen take advantage of their immunity to make all sorts of charges which, even when disproved, are repeated as gospel truth by those who WANT to believe the slander rather than the truth. If they can do these things to men of opposite political faith then they can do it to us and the representatives of all organized labor.

It is this writer's belief that we have all too many lawyers in our legislative todies. They are too one sided. We need more of a cross section such as representatives of labor, farmers, small business etc. A local newspaper column, commenting on recent labor disturbances pointed out to what a great extent lawyers are sitting in on collective bargaining as employer representatives. It pointed out the greater percentage of strikes resulting in such cases as compared to those where the employers themselves and their employes sit down together. Think it over for yourself.

Local Union 1 Soccer Team of 1921



These sturdy gentlemen were members of the 1921 soccer team of Local Union 1, St. Louis, Mo. The photo was published in the September issue of The Electrical Worker that year. From left to right: H. Airdt, Tom Smith, Johnny Smith, Frank Andrews, Joe Kennedy, Bert Bradford, John Pahlman, Mig Pyatt, Fred Wamhoff, Johnny Bucher, Leo Flotron, Garry Spencer, Frank Gleason and Past President James F. Casey.

At this writing the conference committees of the Senate and House have agreed on the amendments to the Social Security Law and it is hoped that both houses will act on them in the affirmative, so that the President can sign the bill and that it will be effective about October 1st. We can thank the fact that this is an election year and that both sides want something to point to when asking labor support, for these amendments going through, for the advocates of a large labor market were not idle.

FREDERICK V. EICH, P. S.

Reports Political Picture Bright in California

. . .

L. U. 11, LOS ANGELES, CALIF.—
This is an official communique. As of yesterday my title is press secretary for L. U. No. 11. Brother Tom West says that's the fellow who always ends his letter with a P.S. but never adds the postscript.

I guess our president, Brother Bob Schweikert, figured I might as well have the name as the game. Since Brother Milne has been kind enough to use some of my verse or worse in the JOURNAL (see "Short Circuits"), Brother Bob decided I could spell a few short words well enough to write a letter once a month. Anyway, I congratulate myself.

Our California primary is just over; and it looks like we are going to have an election in November for a change. After accepting the vice-presidential nomination two years ago, Governor Warren was not so successful with his cross-filing this time. It was a little more difficult to convince people that he is non-partisan. So we will have Jimmy Roosevelt opposing him in November, as the Democratic nominee.

Speaking as a Democrat, I am happy about it. Jimmy may not be the man his Dad was; but we still owe him (his Dad) something. We can't pay him so I am in favor of paying Jimmy. Local No. 11 endorsed him. He is worthy of it, in his own right.

In politics everything is comparative. When it comes to voting, you can't choose between paradise and purgatory. You must choose between the Democrats and Republicans. That still leaves me only one choice.

In the Senatorial race we will have Helen Gahagan Douglas opposing Richard Nixon of the "well-known" (other adjectives censored) "Mundt-Nixon Bill." This issue is clear-cut, and I believe the choice is obvious. Local No. 11 endorsed Mrs. Douglas in the primary and is almost certain to do so again in November.

Manchester Boddy, the publisher of L.A.'s liberal *Daily News*, entered the race as a Democrat. His timing was wrong. Even Sheridan Downey's endorsement didn't help him. Helen Douglas was the logical contender.

In the sixteenth congressional district, where I vote, we have Tom Jackson, another reactionary, on the Republican side and Esther Murray for the Democrats. It has been a long time since we Democrats have had a comparable candidate. Here, too, the issues are clear-cut and I am optimistic about the result.

Enough of politics for now except to say that I hope the L.L.P.E. makes all the Brothers interested in politics. We've got the votes if we can deliver them.

We are sending 35 of the Brothers and Sisters to Miami this year. That is just half of a full delegation.

If this report seems unduly long, remember that it has been several months since Local No. 11 used any space in the Local Lines' pages. Anyway, if you read this far, I didn't do too badly. Luck to you.

L. U. No. 11 was recently saddened by the death of Regnal Loyd Hall, business representative of Local No. 11, District No. 4. We should like all our Brothers to know a little about him.

Regnal Loyd Hall was born in Bethany, Missouri on February 25, 1900, later being taken to Oklahoma where he was left an orphan at the age of four with a younger brother, Carl. They were reared by their grandparents, and the home of Regnal's rearing was one of poverty and hard work. The young lad knew how to drive a four-horse team to plow or harrow when he was only six years old, and the large family rose early and worked late, as all farm boys know, to care for the animals and perform those arduous and endless tasks and chores.

As a boy of 14, he went into the world to make his own way. This he did in diverse ways, on the plains as a cowboy, in the oil fields, and working as an automobile mechanic.

He was united in marriage with Alta Blumer. Later they went to Newton, Kansas. He worked there at railroading, and for a time operating a garage. This marriage was blessed with the coming of two children, Joyce, and Regnal, Jr.

In 1935, the Hall family came to California. Here, Brother Hall turned his capable hands to electrical work. He became a member of the International Brotherhood of Electrical Workers, Local No. 691 of Burbank-Glendale, California in 1937, and three years later he became business representative of Local 691. This office he held for six years. During this term, the various locals in Los Angeles County amalgamated into one local union, No. 11 of the I.B.E.W. and Local No. 691 became District No. 4 of Local No. 11. While in office, his clear, conscientious understanding

and tolerance endeared him to his fellow workers and many friends. He was a man among men, having their full confidence and respect. The loyal support of the members of Local No. 11 throughout his illness is eloquent testimony to the service he rendered, and the personality and character that were his.

During World War II, in his capacity as business representative, Brother Hall served as a member of the Gas and Tire Rationing Board, the War Man Power Commission, and on the numerous War Bond drives.

His everyday working life has been a living example to all of us as to what a man can do in his associations with his fellow men, to make this world a better place in which to live with each other. Always conscientious, he set a high standard of ability and qualification to which he religiously adhered in the performance of his daily work. He gave unsparingly of his time to better the conditions of his fellow-workers. Blessed with an unusually high sense of justice, fair-dealing, and fair-play, he counseled wisely with his associates in keeping turbulent changing conditions leveled off on a reasonable basis of action. Always willing and ready to devote his time and talents for the relief of his fellows, he was truly one who "sought his own in another's good."

He leaves his wife, Alta, his children, Joyce, and Regnal, Jr., his brother, Carl, and many, many friends.

RAY DODDS, P. S.

Well, Rub Our Eyes! Here's Local 25 Again

L. U. 25, LONG ISLAND, N. Y.—Don't rub your eyes Brothers, it's really Local No. 25 in the JOURNAL once again. Hope to make this contribution a regular one.

For the benefit of those members of the Brotherhood who never heard of Local 25, our jurisdiction covers Nassau and Suffolk Counties on Long Island, New York—a territory of about 100 miles in length and varies up to about 25 miles in width. Nassau County has just reported a population of about 650,000 and Suffolk County about 272,000. Very close to a million inhabitants in our jurisdiction.

We can boast of several large aircraft factories and various other types of manufacturing plants as well as the U.S. Government Brookhaven Atomic Energy Laboratory, the home of the United Nations at Lake Success, the U.S. Airforce's Mitchell Field, and we have fortunately been enjoying one of the largest building booms in the entire country.

Now that we are acquainted let's have the news of Local No. 25.

Our election in June was an event of momentous importance. Bill Halleran our new business manager led the winning "New Deal" ticket by almost three to one. Bill is a charter member of Local 25, and a member of the I.B.E.W. since 1914. He served Local 25 faithfully as financial secretary for 18 years and doubled five of the 18 years as assistant business manager. His honesty, fairness and integrity are unquestioned. He is a liberal and progressive fighter for the rights of organized labor, and last but not least, a top notch electrician. What better qualifications could any local union hope for in a candidate for business manager!

Brothers, Bill has a tremendous job ahead of him and he is going to need the cooperation of all our members. Local 25 has been standing still a long time and everyone knows when organized labor stands still it goes backward. Let's all pitch in Brothers and help him do the job we expect of him. Let's get out to every meeting. Get up on the floor with ideas and suggestions for the good and welfare of the membership. Bill has assured me his office door will never be locked. If you have something on your mind come on in and unload it. Team work is what we need fellows. The election is over and we are all still on the same team.

Space does not permit me to eulogize individually on the balance of the officers elected, but collectively from the president through the Examining Board you have a slate of officers you can be well proud of.

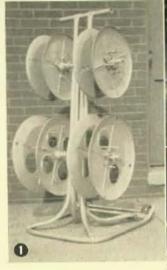
Our new slate of officers is as follows: President Andrew Everett, Vice President Joseph Gramer, Recording Secretary William Callanan, Financial Secretary James Neumeyer, Treasurer James Allwin. Executive Board: Joseph Gramer, chairman, John Dougherty, Alex Martin, Charles Schaefer and Harold Starke. Examining Board: Phillip Currie, Rudy Hedlin and George Wheeler, and of course Business Manager William N. Halleran.

Hearty congratulations to all our new officers and all best wishes for a successful tenure of office.

The great philosopher John Marshall once said, "Any organization will become stagnant if the flow of fresh blood is cut off for too long." Brothers, I think we have just witnessed wholesale transfusion.

At our July 11th meeting we were honored with the presence of International Vice President Joseph Liggett and International Representative Alfred Terry. Brother Terry gave a very enlightening talk on the history of organized labor. He touched on the highlights of the Taft-Hartley Law and brought forth how big business through such organizations as

Useful Items from Electrical Tubing



Brother Roy R. Esher, a member of Local Union 98, Philadelphia, has a hobby of producing useful gadgets and items from electrical tubing. He has submitted these photos to show fellow members what can be done with a little tubing and a lot of ingenuity. 1. A wire reel, easy to handle, will take up to No. 6 wire. 2. An outdoor chaise lounge, which will also serve as a chair, and is easy to store. 3. A combination item which includes chairs and table, 4. The chaise lounge above is shown "broken down" to form a chair. When extension is removed, storage problems are



solved quickly. Brother Esher, who lives at 827 Andrews Ave., Collingdale, Penn., has applied for patents on his items.

the National Association of Manufacturers is constantly plotting the downfall of organized labor.

Vice President Liggett installed the newly-elected officers and spoke on the need for team work for a successful local union.

One of the first progressive actions instituted by the new administration was the appointment of a wage and policy committee at our July 25th meeting. This will be a standing committee, meeting when necessary to formulate ideas and suggestions of the membership. They will study agreements, bylaws, working rules and welfare plans and will report their findings to the membership for discussion and action. Whenever the local union decides to reopen its agreement with the contractors this committee will then appoint a sub-

committee to be known as a Negotiating Committee to meet with the contractors. This type of committee will have a very definite advantage over past agreement committees, in that they will have had months of preparation prior to the actual reopening of the agreement.

We are now in the process of negotiating a new agreement. We have a tentative offer on wages and hope to consummate an agreement within a few days. Of course the new agreement will be in force, we hope, before this is published.

We all hope for the speedy recovery of Brothers Frank Murphy, Tommy Saul, Norman Gates and Charles Cottrel who at this writing are on the inactive list due to sickness and injuries. Let's make an effort to spare an hour or so and pay these Brothers a visit. It's tough to be shut in, Brothers. You never realize it until

it happens to you.

This being our first contribution in many a moon, I sincerely hope our editor, Brother J. Scott Milne will stretch a point if we have exceeded our quota of space.

So long until October.

WALTER BUTLER, P. S.

Local 28 Members **Enjoy Annual Outing**

L. U. 28, BALTIMORE, MD.—By the time this issue reaches you, vacations will be almost over and from all indications everyone has had or seems to have had a wonderful time. I have noticed from the reports of the National Safety Council that vacation casualties have taken a drop so far this year. That in itself is a bless-

On Saturday, August 5th, the annual summer outing of Local Union No. 28 will be held. Brother Carl Scholtz as usual will prepare the menu, buy all of the food and see to the preparation. So we can all look forward to plenty of good imperial crabs, roast beef and above all plenty of good roasting ear corn. I will tell you all about it in the next issue.

One of the nice things about our country is how well the people stand up under other people's troubles. With one World War just over and a threat of another on our door step, everyone seems to go right along singing and laughing. Boy! That's America-God Bless It.

If any of you fellows should happen to drive down Pennsylvania Avenue in Washington, D. C. and see the White House all crated up, don't be alarmed, they are not sending it to England, they are just remodeling it.

Again, I find it necessary to ask, plead or advise you all to register, so that you will be able to vote. I have lately found out that there are quite a few men who carry union cards but do not carry voting cards. This situation should be eliminatedthis year above all other years. The reason for the last statement is that we have in Congress and in the Senate men who are not only anti-labor but have denounced other men for calling this country a democracy. One in particular is the Taft-Republican and Chief Lieutenant of Senator "Bob" Taft, Clarence J. Brown. These are the kind of people we, "organized labor" must defeat and the sooner the better-so get out and register so that you may vote.

One other thing, please don't forget your donation to Labor's League for Political Education. They really need your help and you will not miss that two bucks.

With nothing more but summer

pleasures on my mind and I am sure they would not interest you. I will close for this month, leaving you with this thought "From the errors of others a wise man corrects his own."

. . .

A. S. ANDERSON, P. S.

Movies Shedding Tears Over TV Competition

L. U. 40, HOLLYWOOD, CALIF,-Last month Local Forty held its nomination and election of delegates to the 24th International Convention of the Brotherhood. The following members were elected: President Charles Thomas, Business Manager Bert W. Thomas, Frank Webster, Dave Barnett, Bill Wauhop and Rollie Ball. We extend our heartiest congratulations to these elected delegates, and know that they will represent the local union to the best of their ability.

There has been much discussion of late, both pro and con, on the impact of television on the motion picture industry. The studios have adopted a "wait and see" policy and, with the exception of Paramount, the majors have not actively entered the TV

Although they are shedding alligator tears over the encroachment of TV on their entertainment monopoly, they have made no attempt to reach a working agreement with this new and booming industry.

I don't pretend to know what the answer is, but I do know that films must and will play an ever increasing role in the daily TV fare. For clarity and reception they are tops. They are not limited to the restricted camera view of a live TV show, and they are more economical. Jerry Fairbanks Studios and others are proving that on the black side of the ledger . . . where it counts.

The pathetic cries of the movie moguls about loss of income falls on deaf ears. They have only themselves to blame. Instead of meeting TV halfway and being a leader in this new field, they have acted the proverbial ostrich and plunged their collective heads into the sand. Only this time it happens to be quicksand, and if the bright boys in the plush offices don't wise up, they are liable to be dragged right into oblivion.

Around the Lots: Business Manager Bert Thomas and Frank Moore attended the Southern Joint Conference held in San Diego, with Local 465 playing host. A nice turnout was reported.

The local was saddened by the sudden passing of two of its members, O. T. Holford and Charlie Wylie. Curly Holford had been at Eagle-Lion and other independents, while Charlie was a mainstay at MGM.

Old timer Lou Bertsch is confined to his home with illness. Anyone wishing his address may get it from the local office. John Bailey is home after an operation, and Clyde Wright is reported on the road to recovery from his sickness.

All members who have any doubts about their voting status should contact this office. Registrations will close 14 days earlier this year, and it is imperative that all members lend their support to labor-backed candidates. There is a registrant of voters in the local office, and I am sure he will be only too glad to be of assistance.

. . .

GEORGE LYNCH, P. S.

Detroit Local Urges Labor Day Activity

L. U. 58, DETROIT, MICH,-September 4, 1950, is Labor Day. This holiday will be a day of recreation and rest for those who are not affiliated with organized labor in one form or another. A more profound concept of Labor Day will be felt by those who amalgamate and form the rank and file membership of your union and mine. Ours is the responsibility of stamping Labor Day truly a red letter day on the yearly calendar. Our actions on this day will be scrutinized meticulously by the press and by those that are not an integral part of our ranks.

We that are members of the labor movement have the choice of spending Labor Day according to either of the following patterns:

1. We can join the ranks of those who are not affiliated with organized labor and spend the day in a leisurely manner at home or at some remote summer resort.

2. We can cooperate with our more conscientious and labor-minded brothers and strike a blow for the labor movement by participating in the annual Labor Day parade.

Which of these two patterns outlines a better guarantee for maintaining the status quo and contributing to a more secure future? All of us, at one time or another, have spent a day in a leisurely fashion, and we know exactly the dividend we receive from expenditure in this form. Let us rather enumerate some of the stronger features of the second

- 1. We enjoy the privilege of showing labor's strength in terms of a numerical spectacle. We can add prestige to the labor movement by presenting a solid front, in place of decimated ranks, in a Labor Day pa-
- 2. We enjoy the feeling of personal satisfaction that comes to us when each of us participates and contributes his share.
- 3. We can reward the tireless efforts of our Labor Day committees.

 If we have sons and wish to teach them sound union principles, participation in our Labor Day parades will replace volumes of verbiage.

5. If we are of the younger members of the organization, let us get behind the old timers and show them that we also can carry the ball when the opportunity presents itself.

We can enjoy a day of good fellowship with our friends and brothers.

7. Keen competition exists between the various segments of labor in any one locality. Which local will have the best turnout? Which one will exhibit the most spectacular group? We can help to place our local union on or near the top.

Most of us could probably list many more good reasons stating the importance of parading on Labor Day. Each additional reason would be an important factor that would help to convince us that we should point our steps on September 4, 1950, to a designated area where the Labor Day parade begins. Let us not be penny wise and dollar foolish. Labor Day belongs in part to those who have struggled, fought, and sacrificed for the privileges that labor enjoys today. It also belongs in part to those that help to protect and safeguard these privileges. Let us continue to build up the prestige of Labor Day. Let us join our Brothers and friends and help make September 4, 1950, the most outstanding Labor Day on record

JOHN MASER, P. S.

Apathy Is a 'Crime' Which Doesn't Pay

L. U. 79, SYRACUSE, N. Y.—Apathy toward the nomination and election of the legislative bodies in the United States, while not legally so, is nevertheless a crime. Guilt lies upon the shoulders of a large percentage of the people in all walks of life. Maybe they don't go to jail for this crime, but, brother, if you are one of the guilty, you should know that crime does not pay, and neither does this.

In 1948, a Presidential election year, out of 93 million people of voting age in the United States, 48 million actually cast their ballots. People in New York State are among the worst. In this state, to start with the 1944 total, there were 6,316,790 people of voting age who actually voted. In 1948, with an increase in potential voters of about 1,363,000, the voting count was 6,274,459. This shows a loss of almost a million and a half votes.

So where does that leave us?

In 1948, we lost not one friend of labor, yet we lacked 14 votes in the House and five in the Senate to lick the Taft-Hartley Law. It's a known fact that about onefourth of the people who do vote at Presidential elections do not vote at midterm elections. Where are we going to get those extra votes?

This year, especially, it is going to take superhuman efforts on the part of all organized labor to capture and retain our liberal friends. In these times of war crisis, it is doubly important to have, not political self-seekers, but legislators liberal in their views and cooperative with the present government.

It does no good to criticize political parties or government. It does no good to criticize management for taking every advantage they can without fair laws of limitation. What must be done is to elect the right men in the right places, men who can do the most good for all of us.

We of organized labor cannot afford to relax our efforts to get out the vote and vote ourselves. Big business and professional men are writing to wage extensive campaigns among themselves and are collecting huge sums of money for the political purpose of getting legislators favorable to them. We of organized labor can afford at least two dollars apiece to the L.L.P.E. Your contributions will be set aside for publicity on issues of which we of the A. F. of L. are interested and for political education and information. There are good candidates in both parties who are friendly to organized labor. Your L.L.P.E. can give you the records of each of them. If you are 21 years of age or older and live in Onondago County, you can register from now until September 26 at the County Court House. Thereafter, voters may register only on registration days in October.

What is expected of you besides contributing to the L.L.P.E. fund is to learn all about the candidates between now and election, register and vote yourself, and use your influence to get others to vote. We don't tell you for whom to vote, but make your vote count when they count your vote.

FRED KING, P. S.

Important Resolutions Passed in Washington

L. U. 77, SEATTLE, WASH.—The Washington State Federation of Labor Convention held in Tacoma, Washington, July 10 to 13, 1950, passed four resolutions of importance to Local 77 members.

The first requested legislation making the payment by Public Utility Districts into employe pension funds legal.

The second asked for changes in present laws so as to guarantee unions representing employes of state, county and municipalities the same rights and privileges relative to collective bargaining now enjoyed by members of organized labor employed in private industry.

Thirdly, a resolution asked the State Federation to go on record as favoring a "prior service clause" for employes of private utilities taken over by public utility districts.

The fourth and last, asked for the immediate repeal of those wartime excise taxes, especially those that apply to telephone service.

The weather being nice, picnics are the thing and so far three have been held by various groups within Local 77, the Linemen's on July 9th, City Light's on July 15th and Puget Sound Power and Light Company's (Central District) on July 30th.

Negotiations start with City of Centralia in August, and the United



Brothers, we want you to have your Journal! When you have a change in address, please let us know. Be sure to include your old address and please don't forget to fill in L. U. and Card No. This information will be helpful in checking and keeping our records straight.

Name	
L. U.	
Card No.	
NEW ADDRESS	

OLD ADDRESS	(Zone No.)

140 CDEE:

Mail to: Editor, Electrical Workers' Journal 1200 15th Street, N. W., Washington 5, D. C.

Members of Decatur Local and Families Enjoy Outing



Members of Local Union 146, Decatur, Ill., and their families are shown at a recent outing sponsored by the Local.

States Bureau of Reclamation on August 1st.

J. M. HAMMOND, P. S.

Rainy Weather Hampers Fort Worth Operations

L. U. 116, FORT WORTH, TEXAS—I'll start off by reporting the weather. Not what is to be, but what has been. At this time we are having rain and have been for a long time. Some of the boys have lost some time because it was just too damp. I won't try to predict the weather, for none but fools and strangers do that in Texas, but if you don't like it as it is, just wait a minute.

They say that some prairie towns in Texas use logging chains tied to tall poles for weather vanes. When the wind blows them straight out, the farmers know they should put their cows in the barn to keep the gale from dehorning them. When the chain comes down off the pole and wriggles to a shady spot under a tree, the farmers hurry to dig their potatoes to keep them from baking in the ground. The temperature drops so low sometimes that words freeze when they are spoken and folks have to wait for a thaw to find out what's been said. And very often it is so dusty that a prairie dog can dig a hole 100 feet in the air.

The weather sure can change in a hurry. The report is that one sultry day in the '80's a teamster was hauling a load of corn across the prairie. The heat was too much for one of his mules and he fell dead from sunstroke. While the driver was unhitching the dead mule, the wagon caught fire and all the corn popped. Two cowboys riding by saw the white pop corn falling all around, thought it was snow, and their hands got frostbitten. A flash rain came up and put out the fire but the wagon bogged down. While the driver was studying his predicament, a blue norther

struck and his other mule froze to death.

Here I am trying to tell you about Texas weather, when I am supposed to report our local news. Nothing has happened here recently, but several of our members helped put all the enemies of labor back in office. They didn't vote, because that would have taken 10 minutes of their time. They didn't know that it was their duty to vote and they didn't realize that it was a privilege they have that lots of people in other countries don't have. They will be the first to holler about the new laws that are sure to be put into effect against labor. Members of other crafts didn't do any better, for on my job there are six plumbers and only one had a poll tax receipt and he lives within two doors of the polls, but didn't vote because he was too tired.

They didn't vote a few years ago and now anyone can be a plumber that goes to Austin, pays the necessary fee and sends them five dollars a year. Brother I am pointing this out as an example of one of the things that can happen to us, just because you didn't do your duty, take advantage of a privilege you have and vote.

Brothers Bud Irwin and Ollie Smith have been added to our Labor Day picnic committee. I'll give you a report of the picnic in the next issue of the WORKER.

Our business manager and his secretary have been given a paid vacation and I hope this stops the secretary from trying to get money out of me for doing my work.

EARL ROBINSON, P. S.

Kansas City to Tackle St. Louis Softballers

L. U. 124, KANSAS CITY, MO.— Further evidence of the fine relations that exist between the officers and members of Local Unions No. 1, of St. Louis, and No. 124, of Kansas City, is the invitation recently received from our good Brothers in St. Louis to attend their annual picnic. One of the highlights of this picnic will be a soft-ball game between the apprentices of the two locals. The challenge has been very enthusiastically received and L. U. 124 will have its apprentice team in St. Louis on the above date ready for battle. Our team will be managed by William Davis who is in the habit of winning contests, having just won the 7th NECA District contest as the outstanding apprentice. We are wishing our boys the best of luck, but may the better team win and may the splendid relations that exist between these two locals be enhanced by this contact.

There are many things which indicate that L. U. 124 is making real progress. When times were tough and there was little work available, local union meetings were always well attended. At the present time all of the members are working and the outlook is very good. Contrary to past experience during good times we have had such good attendance at meetings that it has been necessary to crowd additional chairs into every nook and corner of the hall to provide the necessary seating capacity. Not only are the members present but they take an active part in the deliberations and give evidence of their interest in, and their desire to protect the jurisdiction of the local These indications of high union. morale are much to be admired as evidence of cooperation between officers and members.

Rumor, as yet unconfirmed, has it that Grandpa Frank J. Murphy has been trying to enroll his grandson in Local Union 124 as an apprentice. Congratulations to the "Grandpappy" as of June 28, 1950. We add the above tidbit in view of the fact that Andy Harvey, Joe Morasch, George Kennard, and Roy Smiley, delegates to the International Convention in

Miami, Florida in October will find themselves properly chaperoned by the other delegate, Grandpa Murphy. Don A. Murphy, P. S.

Local 146 Will Fine Non-Paraders Labor Day

L. U. 146, DECATUR, ILL.—Local Union No. 146, I.B.E.W., has decided to make an all-out effort to parade in larger numbers this Labor Day. With this end in view, the members at the last regular meeting voted to levy a fine of \$5.00 on any member of Local 146 not parading, and not furnishing a legitimate excuse to the Executive Board if unable to parade. This drastic action should be entirely unnecessary to secure a full turnout, but sometimes we American workingmen take our "liberties" too much for granted and the majority of us need a good stiff jolt to wake us up.

This year, Labor Day should offer a challenge to all labor unions to show Communist-dominated countries that American labor is solidly backing its government's policies abroad. They can do this best by parading in larger numbers than ever before, even if it means a sacrifice of time and effort on the part of those participating.

Our Business Agent, A. C. Kohli, is enjoying a week's vacation in Wisconsin and plans to take his other week later in the year. Early this spring, the local union voted to give its two full-time employes vacations with pay. Our office secretary, Miss Margaret Vaughn, has already taken her two weeks. President N. O. Primm is acting business agent in the absence of Mr. Kohli.

As far as we can learn, most of the jobs under way are making satisfactory progress. The Staley job is nearing the finish, with several weeks' work left to complete. The Borg-Warner job is just getting started, as is the Revere Copper and Brass job in Clinton. The Hamilton Electric has several good contracts due to begin soon, including the new Y.M.C.A., the Strasburg-Stewardson High School and several other nice jobs.

The Bill Krigbaums are the proud parents of a new baby girl and Bill passed candy bars around to all the boys on the Staley job.

According to the latest information, George Routson is now able to be up and about, but will not be able to work for at least a year.

Kelly Trail is now operating a restaurant in Fort Lauderdale, Florida. We do not have his exact address but hope to hear from him again, so that we can file his new address for future reference, in case any of the boys go down his way.

Business Manager Kohli had a card from the Bill Warrens and they were in London. From there they were to go to Amsterdam, Holland. They also will tour France and Scotland before their return on August 22.

Another one of our boys, Howard Braden, is moving to Tampa, Florida, in a few weeks.

Well, fellows, this seems to be about all for now. If you have any news, send it to the following address:

1073 East Main Street, Decatur, Illinois

BOB WAYNE, P. S.

Local 175 Is 'Sold' And So Are Townsfolk

L. U. 175, CHATTANOOGA, TENN.

News from this local union has been missing from these pages for quite a while, and we intend to let it be known that although we have not been tooting our horn, we have at least been active.

It isn't the intention of the writer to say nothing in a few thousand well-chosen words nor to write a "Webster special" in order to sell ourselves on unionism. Brothers, we're sold, and so are the good people of our town, who are sold on craft competence. But if other writers like fiction—it is their privilege.

We've heartily endorsed and supported the LLPE and feel that our efforts have not been in vain. We sincerely hope the Taft-Hartley Act, which has lent nothing but confusion and dissension to industry and labor, will soon be abolished. The complexities and contradictions—regardless of its original meaning—allow too varied interpretations. Give us something

sound and with the beauty of simplicity of unity. And what, may we ask, was wrong with the Wagner Act?

To further remind you of how much unionism is appreciated in this particular spot of the southland, we will refer you to our own trade as an example. First, may we hand our union contractors a bouquet, for it is through their efforts and through the efforts of our own conscientious craftsmen, that we are able to enjoy such congenial public relations. We admire those men who can go out on competitive bidding and bring in all types of work, even house-wiring, with such a surprisingly high percentage of the total electrical work done here.

At the present we are not doing as much in the immediate downtown area as we have done in the past. City building is a bit slow. We do have an unusual amount of work at a leading department store and new construction on an insurance building which will have been completed by press time. One of our present larger jobs is the nylon plant expansion, a few miles north of the city. The electrical work was let to a Cedar Rapids contractor who also had the original wiring on the plant three years ago. The writer had hoped to contact the management and let him speak of the good relations that exist and the progress made but was unable to reach him in time for this edition.

Other larger projects are the Hales Bar Dam and Widows Creek job, both TVA. And we have some work at the Tullahoma job which will probably break by late fall. By that time we hope to be able to invite Brothers

One of the Bigger Jobs in Chattanooga



These men of Local Union 175, Chattanooga, Tenn., recently completed the electric work on the Tennessee Product and Chemical Corporation job. Kneeling, left to right: Rex Pendergrass, Vernon Prestwood, R. L. Lovvory, Robert Brock, and Superintendent John Kennedy. Standing, left to right: Perry Brock, Robert Stroud, Jimmy Greeson, Steward R. R. O'Day, Harry Secrest, Robert Harrington, Sr., Robert Harrington, Jr., W. A. Iles, Earl Cornelius, Benton Godsey, Jr., Henry Hix, Andy Anderson Jack Simon and Construction Supt. Colburn.

Labor-Management Dinner in Rockford Is Big Success



Members of Local Union 196, Rockford, Ill., meet with representatives of the Central Illinois Electric and Gas Company at a dinner. Such dinner sessions with management spokesmen have benefited the local greatly.

from other locals to work in our jurisdiction. It is always a pleasure to see the old familiar faces and to meet new friends.

The writer wishes to pay personal tribute to the newly-elected business manager of our neighboring L. U. 760. Scores of our friends have asked to be included in congratulating you, J. K. "Slick" Nichols. We have ultimate faith in you, "Slick," and will bet our shirts that you will always do everything in your power to help make L. U. 760 one of the very best.

Were we to neglect to mention our apprentices and those young journeymen who have just topped-out, it would certainly be an injustice. They are assuming the grave responsibilities they sought and are molding craftsman-like character which merits our heartiest congratulations.

It's a promise—next issue will find us more fully prepared to have a more presentable column, so let's say we will meet again here next month.

JOHN T. HARRIS, P. S.

Rockford Scores Gains In New Agreements

L. U. 196, ROCKFORD, H.L.—This is our first attempt to send you anything that we think might be interesting enough to print in our JOUR-

We have had a good year here in Local Union 196 and have just completed negotiating the last contract we have with our employers. The wage increases haven't been enormous (up to 10 cents per hour). However, the changes in our agreement aside from the wages have been beneficial to the employes in our utility company, the municipal, the R.E.A. Co-op., and in our outside contracts. Again we have demonstrated democracy in action, as our different negotiating committees with our different employers have done a fine job in keeping up our good labor relations.

I believe the improvements that have been agreed upon in our present agreements would never have been accomplished if it hadn't been for the respect that the employers have for our different negotiating committees, as well as the respect the committees have for the employers' committees. To us here in 196, the general working conditions and the good feeling on the job and the many benefits that we receive, such as showing up a few minutes late for work because we may have overslept or were caught with a flat tire or some other incident, and not being docked, as well as getting through the job at 2:00 in the afternoon and getting a full day's pay, are some of the things that we feel cannot be written into an agreement.

Although we have our contracts with our present employers negotiated, there still is plenty of work to be done. At the present time we are attempting to negotiate an agreement with the Superior Tree Expert Company, Inc., which up to this time has been open shop. We have all their men who work in our jurisdiction signed to membership cards in our local union, so with the support of the men I am sure we will be able to negotiate a good contract with this line clearance contractor. At the present time this company employs about 40 men in our jurisdiction.

Nothing in our contracts specify labor-management meetings with our employers; however, we attempt to have them at least every six months, I am enclosing a picture which was taken at our labor-management dinner recently. In this case our employer is the Central Illinois Electric and Gas Company in which there are 14 different departments. At these meetings all the stewards, the Executive Board members and the business manager of the local union, and the foremen and superintendents of the various departments and the officials of the company are in attendance and as a rule, except in case of sickness, they are out 100 percent. At these meetings everyone is allowed an opportunity to bring up or discuss anything he thinks is helpful to the employer or to the employe, but in the past year these meetings amount to nothing more than a formal gettogether for a bite to eat and some friendly conversation and possibly a game or two of cards as we have been successful in settling all grievances or disputes in the different departments without carrying them

into our labor-management meetings.

The one thing we think is outstanding with this employer is that at this particular labor-management dinner meeting the six men at the head table represent 229 years of service with the Central Illinois Electric and Gas Co. The men, reading from right to left are: Rudy Johnson, Electric Meter Department, 31 years; next to him is Charlie Monks, gas meter foreman in the Gas Meter Department, 47 years; then Augie Leitz, lineman, 29 years: Roscoe M. Bert, superintendent Electric Transmission and Distribution, 46 years; Earl White, crane operator at the Electric Plant, 27 years; Charlie Taylor, maintenance engineer at the Electric Plant, 49 years.

We think this represents more years of service by three stewards and three department heads than any other local union in the country. How about informing us if we are wrong,

all you other local unions?

Here's hoping our future years will be as successful as the past few have been, and hoping the same for all our local unions in the I.B.E.W. However, in order to have this much success I feel sure it will be necessary for all members of our organizations to get out and do their best to defeat the anti-labor people both in Washington and in our state legislatures, right on down to the aldermen in our cities and towns. Any of you business representatives who have had much experience in organizing and negotiating agreements with cooperatives and municipal outfits realize the hurdles you have to make under the Taft-Hartley law, as well as the problems you have when you are faced with an anti-labor City Council, or board of directors in a cooperative.

As I have mentioned before the labor relations with the Central Illinois Electric and Gas Co. are very good, as well as the labor relations with our other employers. However, it was a tough job to get the other employers to see the light until after they had been operating under a collective bargaining agreement.

This article wouldn't be complete without mentioning a word of thanks and praise to the staff in the International Office and especially President Tracy and Socretary Scott Milne, and last but not least, our own Vice President M. J. Boyle.

Don't forget to attend your regular union meetings.

EDWARD H. BLANCK, P. S.

Atlantic City Scribe Raps 'Hidden Taxes'

L. U. 211, ATLANTIC CITY, N. J.— It's nice meeting up with you folks again. I'm going to make this article short and sweet. This has been a month when yours truly has not had a chance to do anything for Local 211. The wife and I have had company at our home most of the month of July and I have not had the chance with all of everything going on to even start an article. Here it is the 23rd of the month and I am just getting started on my September article.

Your scribe has just finished reading an article in the August issue of the Coronet magazine. And on page 66 you will notice an article called "The Hidden Taxes You Never See," in which the author of these statistics states that each of us work at least four months of each year just to pay the cost of the government. If all the readers of the ELECTRICAL WORK-ERS MAGAZINE could get a copy of the above magazine and just take time out to read that article-maybe we could start the ball rolling to start cutting some of these taxes down. Just realize, for a bottle of whiskey, we pay \$3.75 and the tax is \$2.06. If you are a pack-a-day smoker your taxes amount to \$42.00 per year.

It's about time the American public woke up and started to do something about these taxes. It seems that the working man is not supposed to save any money. Your scribe was just nicked for \$41.16 more in taxes for the year of 1948. Interest inclusive in the amount. Things like that hurt especially when one has tried to be honest with the Government and Uncle Sam.

I read somewhere, if I can word it correctly, that Arthur Godfrey says-"A fellow doesn't get to see much of his money any more, with all those automatic pay-roll deductions. Now I know how a cow must feel towards a milking machine." I know personally that there have been years when I overpaid because I neglected to mention one or two articles that would have probably saved me money had I mentioned them, but what happens, the Government isn't interested in that, all they want you to do is give. Well after all what's a rich man anyway? Just a poor man with money. Oh well, if it keeps up I will destroy myself. I will go out and throw my-

Make
Democracy
Live
REGISTER
and VOTE

self in front of a passing blonde. Hey! that's an idea.

Well by the time the boys have read this article another racing meet will have gone by and through the turnstiles.

August 10th was opening day and the season will run for 45 days thereafter. I would like to predict one thing right here that-"Horses don't bet on people." I can tell right now how to beat the first four races each day-Don't show up until the fifth race on the program. The race track to me is a place where you pick up a racing form and say-Eeni-Meeni -Mini-until you haven't any MOE. So by the time this is being read, a lot of money will have changed hands. At least horse racing is a clean sport. In fact I never left a race track yet without being cleaned. Track mentioned above: Atlantic City Race Track, Aug. 10.

Well here's where I sign off. I take back what I said about the taxes up above because coming October one Uncle Sam wants more taxes and at a time like this we have to get it up. I also put in a little more than I wanted to say. So now you have it

until next month.

BART "CURLEY" MAISCH, P. S.

We Have Two 'Wars', Cincinnation Reminds Us

L. U. 212, CINCINNATI, OHIO— Just a few words from Local 212 to let all the Brothers around the country know we are still in existence here in Cincinnati.

As was reported last month, we had a few changes in offices with the last election and that also brought a change of press secretary. Brother Schmitt, our former "News hound," is now devoting all his spare time to his duties as secretary of Local 212, I know all the boys will miss the highly informative column that he managed to get into the JOURNAL each month for the last 10 years. I'm sure I'll have to work hard to fill his shoes and to you, Brothers, it will be quite a transition from a man who saw almost everything going on in Cincinnati, to one who cannot find his way out of a closet. I'll try my best, though, and perhaps I may be able, in a small way, to replace Brother Schmitt, the best news hound in Cincinnati for many a year. From all the Brothers at 212, a vote of thanks for the way he helped to put us on the map.

Now to get a look at the news around town. Work is holding up fairly well around here—a bit better than last spring but not enough to cause anyone to drag up and head for 212. We are running on about an even keel, no one losing too much time, but no overtime, either.

Brother George Morris, our newly reelected Executive Board member, and Brother Duke Lowry, both well known in Pittsburgh, Detroit and way points, are on the shelf at this writing. Brother Morris is a very sick man and Brother Lowry has a broken foot. Let's all wish them a quick recovery.

On the national scene, this Korean war is tough, to say the least, and it would come just as we have worn out all the clothes we had left from the last one. It looks like we will all have to get together and whip that thing into the right shape. But (and let's not forget this, Brothers) while we are doing all we can to win the war, don't lose sight of the fact that if we are starved to death by a labor-hating politician, we are just as dead as if we were shot by an enemy bullet. If we are subjugated by a host of anti-labor laws, we will become just as much slave laborers as if we were captured by a hostile enemy. So let's remember that we have a war on two fronts, Brothers, and we will have to fight like hell to win.

C. EDWARD KENKEL, P. S.

Toledo Members Honor Veteran of 34 Years

L. U. 245, TOLEDO, OHIO-As last reported here, Local 245, Toledo, Ohio was in the process of negotiating a new wage agreement with the Toledo Edison Company. The local rejected the third and final offer of the company. We are now in the process of arbitrating the settlement as provided in our contract. Elected

Veteran Honored



Brother Charles Neeb receives congratulations from Financial Secretary Oliver Myers of Local Union 245 after Brother Neeb had thanked members of the local for gift they presented him on his retirement.

to serve as arbitrators for the local were Brothers Fred Jones and Mathias Gaynor.

Recent deaths in the local were Brothers Christ Landeau and Dale (Doc) DeTrow both of whom were members of the local for 16 years. Brother DeTrow was serving his third two-year term as recording secretary and had also served as press secretary. Death also took a past president of Local 245, Brother Oscar Buchanan. Brother Buchanan served as president for 10 years before withdrawing from the local to take a supervisory position. After withdrawing "Buck" retained his membership in the International. He was killed in an accident on the tower erection job out of Stryker, Ohio.

At the regular meeting of July 13th, President Stephen LaPorte presented to Brother Charles Neeb a present on behalf of the local in recognition of 34 years of service both as a member and past president. The present was a very fine camera equipped with a tripod to help Charley in his amateur photography, now that he has retired.

Brother Leo Haas was elected to fill the vacancy for recording secretary. Brother George Thomas was elected to fill Brother Haas's place on the Executive Board.

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PAUL SCHIEVER, P. S.

Phoenix Local Praises **Financial Secretary**

L. U. 266, PHOENIX, ARIZ,-Local 266 is fortunate and proud in having as its financial secretary, John Murdoch, a veteran member of the I.B.E.W. "Jock" a Scotchman from the word go, is nearing his 65th milestone along life's road, and has been a member since June 16, 1916.

John, first allied himself with the I.B.E.W. movement as a member of Local 213, in British Columbia. During his membership in this local "Jock" worked in various capacities for three different companies: British Columbia Telephone Company, Sydney E. Junkers Company and the British Columbia Electric Rail Road Company. This covered a 17-year span commencing in 1912.

Late in the year of 1929 when the stock market crash had painted a rather blurred picture in the economic world, John gathered his family to-gether and departed for the sunny climes of Arizona and the Salt River Valley. Shortly after his arrival in Phoenix, he went to work for the Salt River Valley Water Users, with whom he was employed until his retirement last year. Since then he has served as a full time financial secretary of Local 266 and has done a first-rate job. When John first arrived in Arizona he deposited his card in Local

Able Secretary



Local Union 266, Phoenix, Ariz., is proud of its financial secretary, John Murdoch, a veteran IBEW member.

640 and later in the International Office. When the Water Users office group was organized in 1946, he transferred his card to Local 266.

Mrs. Murdoch passed away in 1940. They had two daughters and three grand children, of whom "Jock" is very proud. His niece and her family reside with him at 1920 W. Monte Vista Road, in Phoenix. "Jock" has a very cozy office attached to his home, where he keeps the union records and conducts the duties of his

John comes from a fraternal and organization-minded family, His brother William in addition to being very active in local politics, is First Worshipful Master of Montezuma No. 35 Masonic Lodge in Phoenix. John too is a member of the Montezuma organization and the Sciots, another Masonic group. He also is active in many civic projects.

"Jock," a rather quiet and unassuming man, is most proud of his Scotch ancestry. His ire is aroused whenever some of his union Brothers inquire whether or not his name ends with the letter H or K "Scotty" rises up with all his five feet, five inches and spells out his name M U R D O C H with an unmatched brr-. The inference being that the

letter "K" removes the Scotch from the name.

In a more serious mood Brother Murdoch can look back over close to 35 years of membership in the I.B.E.W., and the organized labor movement. We who are younger than he can look forward with the hope that perhaps in a small way we can emulate his fine labor record. Then with a glance in the past, we can be thankful for trail blazers like this fine little man, who are responsible for the working conditions we enjoy today.

JOHN G. O'MALLEY, R. S.

Intentions Were Good, But This Is Better!

L. U. 292, MINNEAPOLIS, MINN.—
My intentions were good! I also had
every thought of telling you readers
about Minneapolis' jurisdiction, about
its different industries, about its men
this time; but, a picnic and a general election have been held so I'd
like to beg off my last month's commitments and go into some of the
activities, and something about our
officers.

Minneapolis is fortunate in being part of a large metropolitan area, and we are also fortunate in having as one of our neighbors, St. Paul. I feel that Minneapolis has one of the finest and one of the most democratic labor unions in the world and our solidarity coupled with the same democratic thinking in St. Paul has bestowed on this aforementioned community, a progressive labor policysimilar working conditions, the same wages, and the spirit to serve the community well by adequate training of the apprentices. We move from town to town-from Minneapolis' jurisdiction to St. Paul's jurisdiction -with a free exchange of cards. The big jobs which the contractors from one jurisdiction have in the others' jurisdiction are manned with the men coming 50-50 from Minneapolis and St. Paul. I've brought out these few points to bring home the fact that we can establish good relations with a common goal. A testimony of our good relations with our sister Local No. 110 this year was the fifth consecutive year that we have had a joint picnic. The two committees worked well together, and the result was a well-programmed, well-run off picnic. One of the leading reasons for the successfulness of the picnic was the great selection of prizes contributed by the individual contractors, the contractors' association, and the electrical wholesalers. A drawing was held every hour from 12 noon until 8 p.m., and just the look on every prize winner's face should have shown just how much the donations of the contractors, et al, were appreciated. Races and games of every type were held and each winner received a prize of which he or she could well be proud. Along with the enjoyment of just dancing, the better ones also won cash prizes, thereby making the evening not only exciting but also mighty profitable. I'm sure that everyone that was fortunate enough to be at the picnic will be great expounders of the fun and enjoyment they had, and will really turn out next year.

A class is now in the process of being organized to study the field of human problems as it applies to our field—the electrical industry. The foreman has to give orders, the superintendent gives orders, and we all have to be able to get along on the job. A class that will try to teach this should be a boon to the industry. If we get the men interested and if we can get it set up, it should be something to write about, so I'll save it for later.

I tried taking pictures of all the officers, but not being a cameraman, it didn't work out, so the names and the office held will have to suffice.

President Edward J. Conway, Vice President Clarence Johnson, Business Manager Roy A. Newstrom, Financial Secretary Guy Alexander, Recording Secretary Leon Johnson, Treasurer Paul Batholoma. Executive Board: E. J. Conway, Cliff Hanson, Fred Schultz, Wilbur Butler, Roger Shore, Merle Larson, Bill Leeper, Sr. Examining Board: Wilbur Butler Benny Morse, Clinton Wilson, Ole Mohn, Donald Peterson.

Our Executive Board does all of our negotiating, and when one group, the maintenance workers, of which our board has a majority, comes to settle for fringe benefits, I wonder whether they will go for something which most maintenance men get or whether the construction worker will get a break even though he is in a minority on the board. Regardless of who is in a minority or a majority, if the majority of workers benefit from what takes place, things will be very good.

We also have five delegates to the next Convention, and they are:

Roy Newstrom, Guy Alexander, E. J. Conway, Orv Westerlund, Carl Gause, Sr.

Work is very good in this area at the present time, so if you like to travel, find out what the conditions are, and if our business agent tells you it's still O.K., come right in. This is all I have right now, so till next month, good luck, and keep selling your union—it's worth it.

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JAMES P. CONWAY, P. S.

Apprentices Graduate In Akron, Ohio

L. U. 306, AKRON, OHIO—Local Union No. 306 held its yearly apprentice graduation exercises on July 18. The exercises and dinner were held at the Portage Hotel, Akron, Ohio. The affair was very well attended by guests, present apprentices and graduates, their wives and sweethearts, offlicers of the local union and employer representatives and their wives. The accompanying photograph identifies the graduate apprentices.

The principal speaker was Mr. O. P. Van Schoit. Mr. Van Schoit was a personal representative of the Honorable Joseph T. Ferguson, auditor of the State of Ohio. Mr. Ferguson is the Democratic opponent of Senator Taft in the November elections for the office of United States Senator. Mr. Van Schoit very ably presented the reactionary and anti-labor record of Senator Taft and, naturally, urged the election of Joseph T. Ferguson. We think Mr. Van Schoit's message in urging the election of Mr. Ferguson fell on many sympathetic ears. Mr. Ferguson was unable to attend due to another important commitment

Local Union 306 Graduates Apprentices



These are newly-graduated apprentices of Local Union 306, Akron, Ohio.

Left to right: John A. Goodspeed, F. Russell Fouse, Gary Ross, Donald F.

Drope, James J. Hyland and Richard N. Hardin.

Chicago Veteran Honored



Pictured at a party honoring Brother Bill Mommsen of Local Union 381 are, left to right, President-Business Manager H. M. Dittmer of Local 381, Brother Mommsen, Mrs. Mommsen, and Earl Hayes, senior switchman.

concerning his campaign for United States Senator.

The graduates were presented with Certificates of Completion of Apprenticeship issued by the National Joint Apprenticeship and Training Committee for the Electrical Industry. These certificates were presented by Mr. P. J. Lowry, Manager of the North Central Ohio Chapter, N.E.C.A. They were also presented with lapel emblems of our Brotherhood by Brother Leo C. Kempel, president of Local Union No. 306.

Other important guests were Mr. Oscar Poole, Ohio representative of the Apprenticeship Training Service of the United States Department of Labor, and Mr. Harry S. Quine, the local representative of the Apprenticeship Training Service of the United States Department of Labor. By the way, Mr. Quine is a member of Local Union No. 306.

Our local Apprenticeship Training Committee covers both the construction industry and the sign industry. The local union members of this committee are as follows: R. F. Clark, secretary, Leo C. Kempel, Paul Hannig, Donald Fraley and William Mallery. The employer members are: R. S. Whisler, chairman, Arthur F. Cooper, Gerry Fox, N. P. Michl and Robert Smith. It is interesting to note that three of the employer members of the committee are I.B.E.W. members on withdrawal.

Local Union No. 306 will have held its annual picnic when this is being read. The picnic is to be held at Summit Beach Park on July 29. The picnic committee has arranged a fine program of events and contests for young and old. Judging by the response from the invitations to the picnic, it is predicted that it will be our largest affair participated in by members, wives and families. We know

that if there are any "short circuits," they will be promptly handled by our member, Brother Al Hartley, electrical maintenance man at Summit Beach Park,

The Fourth Vice Presidential District Progress Meeting at Roanoke, Virginia, was attended by the writer and Assistant Business Manager S. W. Oaks. We believe this meeting was the most instructive and successful Progress Meeting to date. Much credit is deserved by Vice President Freeman in the arrangement and conduct of this progress meeting. On behalf of our local union, we wish to thank Brother "Toby" Robinson, business manager of Local Union No. 637 and his local union for the fine southern hospitality extended and enjoyed by our delegates and wives.

It is not to our liking to bring a serious note into this letter after mentioning our apprentice graduation exercises and the local union picnic, but let us all hope and pray that the Korean situation may soon be resolved with a speedy victory for the principles of Americanism against communism.

C. W. MURRAY, B. M.

Business Getting Better In Huntington, W.Va.

L. U. 317, HUNTINGTON, W. VA.—Howdy, I.B.E.W. Brothers! Business is pretty good with Local 317 at present and, I'm glad to report, is steadily improving. We have very little unemployment, thanks to our neighbor locals of Charleston, W. Va. and Portsmouth, Ohio. These locals have absorbed most of our unemployed and we are very grateful to them. Our business agent, Charles Singer, has just returned from a very important

business meeting in Roanoke, Virginia, where several officials of the I.O. were present.

I saw "Curly" McMillian last week and he is still full of that jolly old humor. If you think you can top some of his tall stories, don't try it—you probably will come out second best.

Our assistant business agent, James Christian, is also a very busy man. It seems that some of our contractors do not realize the importance of the provisions of the LB.E.W. Benefit Fund, and it is requiring quite a bit of extra time and unpleasant contacts to remind these contractors of these provisions. I believe it would be good business if all I.B.E.W. workers would make it a point to inquire on all jobs if this benefit fund is being paid. If old age is not at present creeping up on you, some day it will be, and that is what this fund is for: to help you when you get too old to work. Make it a pleasure and a duty to know your benefit fund is well taken care of. You will be helping yourself and your local, too.

We are getting all steamed up politically in 317 and are all very proud of our knowledge of unionism. In fact, each one of us believes he could get on the radio and make a better speech than his Brother, and yet both of them would be right because they see things alike. Boiled down, it all adds up something like this: "Get that guy at the polls who has been chiseling in on the rights and privileges of organized labor. We know the chiseler, we know the answers. X marks the spot."

J. E. SMITH, P. S.

Chicago Local Honors 37-Year Veterans

L. U. 381, CHICAGO, ILL.—Two 37year veterans of telephone work, Bill Mommsen and Hank Schutte, attended retirement parties given for them June 29th, 1950.

Sixty-four years young, Bill Mommsen, still able to do a mean square dance, was honored by 120 co-workers, former co-workers, and management representatives at a turkey dinner and square dance.

Bill has worked most of the time on the near West Side, just west of Chicago's Loop, old West Office and recently at Monroe Office. Bill was quite active in his younger days managing girls' softball and volleyball teams. He leaves two sons Ray and Bill to carry on the work in the telephone company.

Mr. Harry Condon, wire chief, Monroe Office, presented Brother Mommsen his Telephone Service Pin and life membership in the Telephone Pioneers of America. Brother Dittmer, president-business manager, Local No. 381 presented Bill his retirement card and case from the LB.E.W.

Brother Bergstrom, who did a grand job as master of ceremonies and promoter of the party, presented Bill a cash gift and Mrs. Mommsen a bouquet of red roses.

Having worked at Monroe Office at one time many friendships were renewed and it was too soon that the time came when Brother Dittmer and I had to leave to attend the party honoring Hank Schutte.

We arrived at Hank's party just in time to witness the presentations. Hank received a fine "two-suiter" from his co-workers and Mrs. Schutte a beautiful bouquet.

Mr. A. P. Murray, division personnel supervisor, presented Brother Schutte his Telephone Service Pin and life membership in the Telephone Pioneers of America. Brother George Schumacher, steward North C.O.I. presented the I.B.E.W. card and case.

The members of Local 391 wish our two Brothers many years of good health and happiness in their retirement.

The results of the election held June 26th, showed the following officers re-elected:

H. M. Dittmer, president-business manager, E. A. Michael, vice-president and Executive Board member Area No. 4, S. S. Mac Gregor, recording and financial secretary, O. L. Bergstrom, treasurer, H. F. Strohm, Executive Board member Area No. 1, E. H. Zahn, Executive Board member Area No. 2, M. J. Tock, Executive Board member Area No. 3.

Elected as delegates to the I.B.-E.W. Convention were the officers, Executive Board members, J. S. Whittaker, R. T. Guernsey, and D. F. Stanley.

EUGENE H. ZAHN, P. S.

Stamford Wage Dispute Goes to Arbitration

L. U. 468, STAMFORD, CONN.—On June 14th, 1950, a wage proposal by the Connecticut Power Company offering a four cent per hour increase retroactive to May 1st, and an additional four cents in 1951, was unanimously rejected by the membership because it stipulated that the contract could not be reopened until 1952. The past year has revealed too many flaws in our agreement that will have to be ironed out before then. The wage dispute was accordingly referred to the State Board for arbitration.

The company's refusal to offer a reasonable counteroffer during two

MEMBER DONATES SOUVENIRS

Louis E. Guise, I.O. member from Birmingham, Michigan, presented to the University of Notre Dame the compass and compensator which had been on the airplane in which Knute Rockne, great Notre Dame football coach, was killed on March 31, 1931.

The presentation was made to Father John Murphy, vice president of the University in charge of public relations, at a dinner held by the Notre Dame club of Detroit.

The compass was recovered from the wreck by Leo Guise and was given to his brother, Louis, in 1942. At that time, Brother Guise expressed the desire to donate the souvenirs to the Knute Rockne collection at Notre Dame.

months of negotiation is in line with the deliberate "get tough" attitude it has adopted in all its dealings with the union since passage of the Taft-Hartley Act. The same short-sighted policy is evident in its repeated attempts to circumvent the contract, which have succeeded only in fostering resentment and ill-will among the employes.

Last November saw the shutdown of our coal gas plant with a threatened layoff of 20 employes, some veterans of many years of service with the company. Through the efforts of the union, this number was substantially reduced, but today seven of our members are still unemployed. A great deal of concern is now felt that the advent of natural gas in this area next year may be the occasion of further layoffs in water gas operations.

RICHARD HART, P. S.

Things Are Picking Up Down in Mobile, Ala.

L. U. 505, MOBILE, ALA.—Well, here it is vacation time and what am I doing? Passing up some good fishing and maybe a swell auto trip to some seclusive spot, or maybe some place along the coast of this great country of ours, where a guy could relax and let down his hair and be just himself, just plain old Joe.

Am I doing that? NO. What am I doing instead? Sitting here trying to "sweat" out this little reporting job. Like most press secretaries.

First let me tell you something that isn't of direct interest to the IBEW, but as union men and AFL affiliates we can and do give them moral and if need be, some financial support, and I speak of the bus drivers' strike here in Mobile. It is going into its seventh week at this writing. They are holding their own.

Some time ago I reported in this column a story about the Henderson interest in building a sugar refinery here. The officials of the company came over to Mobile to complete the deal in purchasing the sight on Blakely Island across the river from

Mobile. The cost of the plant hasn't been announced. But it will be the most modern plant of its kind in the country.

Construction on the refinery will be started in September and we expect it to be completed in June next year. The mill will go into operation immediately upon completion. The annual payroll is expected to be around \$1,400,000 yearly.

Work around Mobile seems to be moving slightly forward, and we hope it will pick up in the near future. There are two or three housing projects in the making, and as I have been informed another apartment hotel in the very near future. That is if the trouble in the far east doesn't cause things to be "froze." In which case the projects may be slowed up if not stopped. The slow up will be the time it takes the builders to get priorities in order to secure material to do the jobs, or to finish what has been started.

The latest news along the labor front here happened last week. Several weeks ago the Police Department organized a local here and asked for a charter. Sam Douglas, president of the Alabama State Federation of Labor came to Mobile and installed the charter. The City of Mobile's Mayor Charlie Baumhauer, laborhating official who is the police commissioner and also the fire commissioner, put over with the aid of his two colleagues a "yellow dog" ordinance. The ordinance required all members of the police and fire department to sign an affidavit that they are not members of any union. Giving them one week to file with the commissioners these signed affidavits. Those not signing the "yellow dog" paper were to be discharged. Those not signing were discharged. Brother Sam Douglas, state president of the State Federation of Labor came to town and went into consultation with local labor leaders and they decided that they were going to war with the city officials over the ordinance. They will go all the way up the line in their fight. Through the state courts, and on until they reach the U.S. Supreme Court if necessary.

Our negotiating committee came

Local 637 Host to Progress Meeting



before the local at the last meeting asking instructions to follow in their meetings with the local contractors in their efforts to come to an agreement when they meet to negotiate for a new agreement which expires in August.

Well, believe you me it is hot, and

I think that I will cut this off and take a run down the lower bay and take along my bathing outfit and try and cool off a bit.

So please remember; "You will soon think mean, if you go with mean people."

PERCY E. JOHNSON, P. S.

Sadness Marks Report Of Montreal Local

L. U. 568, MONTREAL, QUEBEC, CANADA—We regret to report the passing away of Brother Georges "Secheresse" Gauthier this past month. Yours truly had the pleasure of working with him for a few years. He was well liked by all and his great sense of humor was the outstanding characteristic of his personality. Your scribe attended his funeral, together with our International Representative, Brother Hugh Lafleur and our business manager Brother W. Chartier. Brother A. Desjardins also attended.

There is another sad note to report, and that concerns our sick members. At the last report, we had 11 of our brothers laid up with either broken legs or broken arms. Our best wishes for a prompt recovery. Welfare Committee, please take note.

By the time you see this in print, we will be paying an extra 50 cents on our monthly dues, effective September 1, 1950. It was voted on and approved unanimously at our last meeting. I should add here that this increase in dues applies only to the "A" members and is also complimentary to our recent increase in salary.

Incidentally, while on the subject of meetings, I wish to congratulate Brother A. S. Anderson of L. U. 28, Baltimore, for his timely item in last month's issue of the Journal. If any of our Brothers has missed it, it would be well worth their while to look it up and memorize it if possible.

I would like to call your attention to the election of officers mentioned in my last report, referring to Brother Frank Stacey as vice presidentelect. It should have read Brother Romeo Ouellette as vice president. I regret this error which was quite inadvertent on my part, of course.

Construction is at its peak in the Montreal district at this time and we are happy to report that all our Brothers are busy. Our membership is growing steadily. We took another nine members in this past month and what's more, our business manager, Brother W. Chartier, placed those new members at work right away.

To give you an idea of the amount of construction going on in Montreal this current year, during the month of June alone, building permits were issued by the City Hall for the amount of 12 millions of dollars. And at the last report, it was believed that the amount would be greater still for the month of July. The largest project among the permits issued for July is for the sum of \$3,000,000 intended for a factory and office for the Hydro-Quebec Commission. There are good indications that

many of our Brothers will be employed on those projects for the coming year.

"Things I would like to see:"

More members attending the monthly meetings.

Motions made by those members who seem content just to sit at the rear of the hall with a discontented look on their faces. Let's not leave all discussions to the same few members at every meeting. Your local belongs to all of us so let's hear your suggestions. But first, you have

to attend your meetings.

A Sports Committee organized.
Believe it or not, we have a lot of sportsmen among our members. Anyone interested in bowling, soft-ball, etc., let's hear from you AT THE

MEETING.
That's all fellows. Thanks for listening and have a good time on your Labor Day weekend.

Louis G. Theriault, P. S.

St. Petersburg Local Has Annual Election

L. U. 682, ST. PETERSBURG, FLA.
—Election of officers was the most important part of Local Union 682's last meeting. We think a fine group of men were installed in their new jobs and look forward to a fine year for Local 682 under these men. They are as follows:

Voss Pneuman, president, Dwight Pickett, vice president, R. C. Appel, secretary, George Shimp, financial secretary, Charlie Roberts, treasurer, Robert Kyle, business manager.

All of these members are new in their jobs except for Charlie Roberts and Robert Kyle who we know, along with the rest, will continue to do a fine job.

The members of Local 682 have also nominated a delegation to represent them at the I.B.E.W. Convention at Miami in October. They are John Davies, George Shimp and Robert Kyle.

I know it's a little early to mention this but it is hard to live here in Florida and not do some bragging about our beautiful weather. Since many of you Brothers from up north will be down this way, perhaps even go through St. Petersburg on your way to Miami, I'd like to tell you some facts about our sunshine. The Evening Independent, St. Petersburg's afternoon paper, gives away its home edition absolutely free to everybody every day that the sun does not shine. The record is 181 issues given away in 39% years, averaging 41/2 papers a year. The last free edition was March 22, 1950. We think this is a record that cannot be equaled anywhere in the world.

M. L. OVERTON, P. S.

IBEW Family



Three generations of IBEW members are seen in this snapshot. From left to right: Merild McCann, a member of Local Union 760 for 22 years; Jerry McCann, son of Merild McCann and a member of Local Union 619, Hot Springs, Ark., and Thomas McCann, Merild's father who has been a member for 34 years.

Local Union 697 Loses A Popular Member

L. U. 697, GARY AND HAMMOND. IND.—Our members were deeply shocked by the death of one of our popular members, Brother Loyd O. Curry. Brother Curry fell from a ladder into a deep concrete pit on the Budd Company job in Gary. He suffered a skull fracture and broken jaw, was taken to a hospital and died soon after.

He was a young man of cheerful and fine personality and well liked by all who knew him. We will miss his jolly laughter and joking ways and the sympathy of all of us, I am sure, is extended to his family in their sorrow.

The reasons why we lose the ones who are dear to us are beyond our feeble comprehension. The ways of the Almighty are inscrutible. The Bible says, "The Lord giveth and the Lord taketh away. Blessed be the name of the Lord." We have no choice but to be ruled by His decisions.

Brother Curry was a son-in-law of Brother W. H. McMurray and leaves a wife, small son and daughter.

We are now in the middle of summer, "When the bumble bee bums and the humming bird hums and the chiggers are jumping around." Local 697 members are all very busy with a good future of construction work ahead of them. While we may need more help soon, I ask any I.B.E.W. men who wish to come here to work to first contact H. P. Hagberg, business agent of L. U. 697, Hammond, Ind., telephone Sheffield 387, so that he can give you the right information.

H. B. FELTWELL, P. S.

Knoxville Local Will Hold Another Election

L. U. 760, KNOXVILLE, TENN .-Since my last letter, to you, Local Union 760 has had an election of officers. The result of this election was questioned and has developed into a controversy. Therefore, the International has seen fit to hold another election, so I am unable to announce to you at this time who the new officers shall be. The ballot, however, will contain the same candidates as the previous one. Brothers, let us unite in our common cause, forget our personal animosities, and make 760 the local union that she should be. Let's work together, not against each other. Let's be BROTHERS, from the HEART and not merely from the lips.

I am enclosing, for publication, a photograph, of three generations of the McCann family, who are at present members of the I.B.E.W. On the left of the photograph is Merild McCann, a member of L. U. 760, whose ticket will be before this is published 22 years old (in July of this year). In the center is Jerry McCann, a member of L. U. 619 of Hot Springs, Arkansas. This son of Merild McCann became a member in February of this year. On the right of the photograph we have Thomas McCann, a member of L. U. 619, Hot Springs, Arkansas, who has been a member of the IBEW for 34 years. He is the father of Merild McCann and the grandfather of Jerry McCann. This is indeed a good and commendable record. Let's give them a salute of approval and commendation for their support and active participation in the IBEW.

Our linemen and maintenance men who are employed on the Edenfield Electric Company's job at Oak Ridge, and their supervisor, Mr. Charles Adelsberg, received a personal letter of thanks and appreciation from Mr. R. W. Cook, manager, AEC, Oak Ridge operations. This was in recognition of their untiring efforts and cooperation in restoring services which had been broken by a difficulty occurring on Sunday, July 2nd, at the K-25 Switchyard.

It is lamentable to see a county, a church, a local union, or an organization of the brotherhood of men, split into factions, each following this or that great or brazen-fronted leader with a blind, unreasoning, unquestioning hero worship. It is contemptible to see them divided into parties, whose sole end is the spoils of victory, and their chiefs the low, the base, the venal, and the small. Such a county or church or organization is in the last stages of decay, and near its end, no matter how prosperous it may seem to be. We must, to prevent these schisms, insist

upon rigid adherence to those principles (upon which our country, our church, and our brotherhoods were founded) which our REASON commends as fixed and sound. Once determined, they must be inexorable in their application, and all must either come up to the standard or declare against it. Men may betray: principles never can. Oppression is one invariable consequence of misplaced confidence in treacherous man; it is never the result of the working or application of a sound, just, welltried principle. Compromises which bring fundamental principles into doubt, in order to unite in one party men of antagonistic creeds, are frauds, and end in ruin, the just and natural consequence of fraud. Whenever you have settled upon your theory and creed, sanction no departure from it in practice, on any ground of expediency. It is THE MASTER'S WORD. Yield it up neither to flattery nor force! Let no defeat or persecution rob you of it!

Political nearsightedness does not improve by age. There are always more imposters than seers among public men, more false prophets than true ones. The paltry ambition of small men disintegrate nations, churches, and organizations. The want of wisdom in our councils creates exasperating issues. Usurpation of power and authority plays its part, incapacity seconds corruption, the storm rises, and the frag-

ments of the incoherent raft strew the sandy shores, reading to mankind another lesson for it to disregard.

When virtue and intelligence become qualities of the multitudes then we will have free government "by the people and for the people"; but for ignorance, selfishness, indifference, and anathy such governments are impossible. This is equally applicable to civil government, church government, and our Brotherhood. When civil or temporal despotism and tyranny are set aside and overcome, and the law has been moulded on the principles of enlightened jurisprudence, we awaken to find that we have been and now are living under a priestly or ecclesiastical despotism that requires a reformation. We do not see the churches and priesthoods of Christendom relinquishing their old task of governing men by imaginary terrors. And, nowhere do we see a populace that could be safely manumitted from such a government. We do not see the great religious teachers aiming to discover for themselves and for others the absolute truth which is both speculative and practical or operative; but we do see them still ruling the world, and contented and compelled to rule the world by whatever dogma is already accredited; themselves as much bound down by this necessity to govern, as the populace by their need of government.

Poverty in all its hideous forms

still exists in our cities, despite the many civic organizations that profess to alleviate the condition. Men take no measure of their wants and their own power to supply them, but live and multiply like the beasts of the field, Providence having apparently ceased to care for them. Intelligence never visits these, or it makes its appearance as some new developed villainy. War has not ceased; still there are battles and sieges. Homes are still unhappy, and tears and anger and spite make hells where there should be heavens. should be no divorce between thought and action. The freedom of man lies in his ability to reason. It is this ability alone that differentiates him from the beast of the field. When the rulers of a country, the ecclesiastics of the church and the officers of our organizations appeal to reason then we have true democracy. The true is that in which life culminates. All wise and true thought produces action. Unanimity of opinion only exists among the multitude who do not think for themselves, but allow the political or spiritual priesthood to think for them. When men begin to reflect, they begin to differ. The great problem is to find guides who will not seek to be tyrants. What is required is a teacher who is also a workman. No doctrines can be apprehended as truths if they contradict each other, or contradict truths we have learned by experiment and observation.

The first preachers of the faith had no thought of domination. The early Christians followed in the footsteps of the Great Master, Jesus, emulating His example. His followers of today, if we accept their word for it, do not teach or follow either his precepts nor his example; instead they teach that he is the only Son of God, the exception. Teaching the doctrine of men, holding men's persons in reverence and preference, worshiping and serving the creature more than the Creator. Falsehood, lying and deception must be denounced even if we find it in the pulpits, the courts, the halls of legislation. We must think for ourselves if we would be free. The full enjoyment of life requires perfect freedom and only the knowledge of the truth of our individual being can give us that. The preachments of modern scribes and pharisees have failed miserably to produce it. Jesus began His ministry by stating that he had come to set free the captives and break the shackles that bound the captives. Let us examine the teachings and ideologies which we have had foisted upon us by these three major racketeers; the light of reason will shine upon them and reveal to us the truth concerning them. And then we shall be free indeed.

CLARENCE T. CREEKMORE, P. S.

Plant Spurs Prosperity in Ohio



Local Union 762 of Ashtabula, Ohio, is enjoying an era of outstanding progress and one thing responsible for it is this new steam generating plant of the Electro-Metallurgical Company, a division of the Union Carbon and Carbide Company.

Things Are 'Buzzing' In Ashtabula, Ohio

L. U. 762, ASHTABULA, OHIO—As this is my first attempt as a "scribe," I hope I will be excused for any mistakes made in the following article.

takes made in the following article.

L. U. 762 would like at this time to thank the Bowling Committee and L. U. 38 for the wonderful program they put on as hosts to the bowlers at the tournament. Our team members and their wives are still talking about it.

L. U. 762 has enjoyed an era of prosperity for the last three years, and we are thankful that we were able to help some sister locals that were not as lucky as we by absorbing some of their men.

I am enclosing a picture of one of the jobs responsible for this era, which is the new Steam Generating Plant, erected by Gillmore Carmeichle and Olson Co. for the Electro-Metallurgical Company (a division of the Union Carbon and Carbide Company).

This plant, one of the most modern in the country, is comprised of two 40,000 K.W. hydrogen-cooled General Electric turbine-generators, with a speed of 3600 R.P.M., at 13,000 volts. All electrical work including the moving, unloading and setting of electrical equipment was done by members of L. U. 762 and surrounding locals.

This plant also has provisions for a third unit which we hope soon to have the pleasure of installing.

Work here has tapered off some but still have some out-of-town men work-

Will let you hear more often, in the future.

ANDREW "ANDY" GIANNELLI, P. S.

Geneva, N.Y., Local 'Promotes' Its Scribe

L. U. 840, GENEVA, N. Y.—Guess this will be my last item to the Worker for some time. I have been installed as Secretary of Local No. 840 and have asked for a better man than I to be appointed as P. S. I am sure he will not "skip" as many issues as I have.

Our new slate of officers is as follows: President John Roemer, Newark, N. Y.; Vice President Walter Hosking, Jr., Geneva, N. Y.; Business Manager Albert Lawerence, Palmyra, N. Y.; Recording Secretary Roy H. Meldrim, Seneca Falls, N. Y.; Financial Secretary and Treasurer Leo Kelleher, Geneva, N. Y.; Executive Board: Lyle Culver, John Roemer, Roy Hobson, Chris Nielson, Ed Brennan, Leo Kelleher, and Charles Wood.

Although there is quite a lot of

Poem of the Month

If You Have a Friend

If you have a friend worth loving, Love him! Yes, and let him know That you love him, ere life's evening

Tinge his brow with sunset glow. Why should good words ne'er be said Of a friend — till he is dead?

If you hear a song that thrills you, Sung by any child of song, Praise it! Do not let the singer

Wait deserved praises long. Why should one who thrills your heart Lack the joy you may impart?

If you hear a prayer that moves you
By its humble, pleading tone,
Join it! Do not let the seeker
Bow before his God alone.
Why should not your brother share
The strength of "two or three" in prayer?

If you see the hot tears falling
From a brother's weeping eyes,
Share them! And by kindly sharing
Own your kinship in the skies.
Why should anyone be glad
When a brother's heart is sad?

If a silvery laugh goes rippling
Through the sunshine on his face,
Share it! 'Tis the wise man's saying —
For both grief and joy a place.
There's health and goodness in the mirth
In which an honest laugh has birth.

If your work is made more easy
By a friendly, helping hand,
Say so! Speak out brave and truly
Ere the darkness veil the land.
Should a brother workman dear
Falter for a word of cheer?

Scatter thus your seeds of kindness
All enriching as you go —
Leave them! Trust the Harvest-Giver;
He will make each seed to grow.
So until the happy end,
Your life shall never lack a friend.

—Anonymous

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work in our jurisdiction, several of our members are working "on the road." We haven't any overtime work to speak of, but, to my knowledge, every one seems contented. In the near future the conditions might turn in either direction.

Our new Business Manager Lawerence, seems to be looking with more than casual interest into everyone's welfare. He has the good wishes of all the local in his new field.

> ROY H. MELDRIM, P. S. . . .

'Recent Addition' Is Doing Well, Thank You

L. U. 1379, DAVENPORT, IA.-Local Union 1379 is one of the more recent additions to the ever growing Brotherhood of Electrical Workers. We received our charter last November and at present the membership is made up of the electricians, prormetrics men, and the electronics men at the east Davenport works of the Aluminum Company of America. We plan on welcoming brothers from other industrial plants into our group in the near future.

A great deal has been accomplished in the few short months since the birth of L. U. 1379. Working conditions have improved immeasurably. We signed a contract with the company giving us six paid holidays and an improved hospitalization and retirement plan. Recently we came to an agreement which gave us shift preference rights, and effective August first a new and improved schedule goes into effect which eliminates the split work week.

Vacation time is here, but only a few fellows have taken them. The other day I heard someone say that he was tired of visiting relatives every year, but with this high cost of living he couldn't save enough to go to the lakes. Maybe that is why the other Brothers have been so reluctant to take vacations.

HOWARD WEGER, P. S. . . .

Baltimore Local Hopes 'Buzzing' Will Continue

L. U. 1383, BALTIMORE, MD.—Here I am again, Brothers. Your scribe will add another chapter to the many that have been put into our JOURNAL up to now.

I will not burden you with too much at this time. Surely you know about the weather and what's more, the yard is humming and buzzing with activity as it never has before. This is a good sign, so let's hope the buzzing continues.

At our recent meeting which was held at the Eagles' Hall, our new officers, who will control the destiny

of our organization for the next two years, were installed and obligated by yours truly. After all the officers were in their respective seats, your scribe, and ex-president, had the great honor and pleasure of presenting the gavel and block to the new president, Brother Horace Buckley. Brother Buckley closed the meeting so that all the members present could partake of refreshments which were prepared by the committee. There were shrimp, celery, meats, bread, cheese and a keg of beer. Oh Boy! What a beer!—and pretzels and potato chips, too. For more data about the refreshments, ask Brother Matcovich, as he was appointed to that post for the night. And our beloved vice president, Brother Cornelius Huhn, surely made with the piano music!

That, fellows, is the highlight of our installation. Come up to the next meeting, as the new chairman will have a lot of appointments to make for his new cabinet. And don't forget our meetings on the third Friday of every month.

And now our "Flashy Flashes." Brother Robert L. Walter, our recording secretary, has been elected to be our delegate to the I.B.E.W. 24th Convention at Miami, Florida. Brother Charles Isaacson, our financial secretary, is the alternate.

With the Labor Day holiday not so far off, I shall remind you again that dues must be paid before the end of September, so don't forget them. I'll sign off until our next meeting.

. . .

REUBEN SEARS, P. S.

New System Has Our Bay Staters in Circles

L. U. 1514, HANSON, MASS.-We are back after the annual vacation and several of those who were laid

Notice

Scrolls of honor and pocket cards, enclosed in plastic cases, and which are a replica of the larger scrolls, are available at the International Office for the use of local unions desiring to honor their members for their years of service.

At the request of local unions, these scrolls and cards can be inscribed in decorative script in the I.O. at a cost of 25 cents a set, and sent to the locals for signature of their local officers and presentation to the honored members. The scrolls should be accompanied by pins of the appropriate number of years service, also available at the I.O.

off in March have been recalled to work. We have learned via the press that the Wheeler Reflector Company has been defrauded of a large sum of money by one of its trusted officials.

Since things have been straightened out we hope business will go along in its former smooth way.

A new system is being introduced which we believe will make things easier for all concerned after we become accustomed to it, but just about now we are running around in circles. The work cards which previously were made out by the workers and okayed by the foreman are now made out in the office and given to the worker, who, after the work is done, has the foreman okay them. But there is a blank spot which is hard to understand at present. Usually we picked up any reflectors which had been washed off and ran them with others of the same size, now there are cards to be made out for them and it is very confusing although we are trying to learn. We wonder if it will be a profitable change, or just one of those plans that looks so well on paper and is a flop in practice.

Our four cents an hour raise which was retroactive to May 1st has been on our checks since the 1st of June, but we haven't yet received a check for the five weeks in May. We all can use it and hope it will soon be forthcoming. With the noticeable rise in living costs there are few of us who can overlook any due wages.

During a recent trip to Canada we were happy to note the higher wages being paid to the workers in the paper mills. We learned that a union had been formed and business has

improved considerably.

And, fellow workers, since we are again at war, let's do our part as in past wars, to finish this one quickly. When we look over the new crop of smart young men who must answer the military call, we recall the agony of the years when our own boys were in action and suffer with those who are now in the same spot. Wars are the result of selfishness and selfishness starts here in our own hearts. When we grab for that extra pound of sugar, lest our neighbor gets more than his share, we are in a small way enacting the part that leads nations into conflict. Don't send your own or your neighbor's boy away to die because of your selfishness.

VERDA M. LANE, P. S. . . .

New Officers Take Helm in Hattiesburg

L. U. 1575, HATTIESBURG, MISS.— This will be the first attempt of your duly elected scribe of L. U. 1575 to try his hand at reporting to and for the JOURNAL.

Election time has come and gone and I am enclosing a list of our officers. We envoke God's blessing on them.

President J. L. Rogers, Vice President P. W. Rouse, Recording Secretary J. N. Daniel, Financial Secretary S. M. Blackledge, Treasurer B. E. Doughty, Business Manager S. M. Blackledge.

The Central Trades Labor Union of Hattiesburg, of which L. U. 1575 is a member, gave a Barbecue open to the public the Fourth of July, beginning with a parade of all crafts affiliated with A. F. of L. (L. U. 1575 was well represented in the parade) with city officials and our fine high school band furnishing some good music.

After the parade everyone went out to the city park where several speeches were made. Speakers included Brother W. L. Hines, president of Mississippi State Federation of Labor, His Honor D. W. Holmes, Mayor of our fair city, Rev. Garland McInnis and others. Then came what everyone was waiting for, barbecued beef with trimmings; plenty of cold pop of all kinds.

It was a beautiful day for a picnic and a good crowd was present. About 2000 plates were served and all had a good time. Come Labor Day and we are planning to have another barbecue, this time larger and better. Some of the Brothers who are warming the bench will once more get a square meal.

For those of you who are interested in baseball: The Central Trades Labor Union is trying to organize a soft-ball team composed of men from all crafts,

Object: To help raise money for the Greater Hattiesburg Association to help complete our stadium now in progress. The aim of the association is to bring professional baseball back to our city and to have a bigger and better stadium. We are looking forward to having some good ball playing down our way and doing all we can to put it over big.

By-the-way, we took time out and negotiated a 12½-cent raise, scale now is \$2.12½ per.

ATHENS MCNEIL, P. S.

Local 1590 Is Proud Of Flood Efforts

L. U. 1590, LEASIDE, ONTARIO, CANADA.—As I look through the last issue of the JOURNAL and see the pictures of one of our locals helping in the Winnipeg flood, it makes me proud of our union. I also become very proud of the unseen things done by our own local. Almost all the requests for communication advice were directed by the civic officials to Rogers Majestic, Ltd., and

Carlsbad, N. M., Apprentices Graduate



First apprentice electricians to complete their studies in Carlsbad, N. M., were honored recently at a graduation program, which had as its theme "cooperation and working to make a success of life." In photo at top, L. O. McBride of the I.B.E.W. presents first certificate to apprentice James Kelly while E. C. Saunders, chairman of the joint apprenticeship committee, looks on. Brother McBride also is a member of the joint committee, Mr. Saunders is a member of the electrical contractors' association. In photo below, guests and apprentices are shown. Standing, left to right: Bob Rowan, director of adult education for Carlsbad City Schools; Mr. Saunders; Bro. McBride; R. K. Spencer, president of Local Union 643; R. L. Bates, trade and industrial supervisor for city schools; Frank Kindel, manager of the Carlsbad chamber of commerce, and Nelson White, assistant manager of the International Minerals and Chemical Corporation. Seated, left to right: Don T. Weems, instructor of apprentices, Apprentice Kelly, Apprentice R. C. Pressley, Apprentice A. M. Mitchell, and Mrs. Burton Brown, representing her apprentice husband, who was unable to attend the ceremonies. Business Agent Louis Rillos of Local 643 was absent when photo was taken.



our field engineers were on constant 24-hour call.

The first request came from the Winnipeg Hydro. They needed means of communication between their water-surrounded plant and a construction crew building a dyke-like road into the plant. A transmitter-receiver unit was immediately set up in the plant and a portaphone supplied to the construction foreman. Another portaphone was installed in a substation, linking it with the main station. For a while, this was the only means of communication and

was credited with keeping power circuits open. We also supplied communication facilities between Flood Control Headquarters in Parliament Buildings and radio station CJCB. Portaphones were in operation here 15 minutes after the call for help was received. Evacuation trains were dispatched via our portaphones. The Canadian National Telegrapher used our equipment. Portaphones were supplied to telephone repair men in boats and to power crews looking for breaks. Our equipment was supplied to the fire department for boat pa-

trol. I could go on and on quoting the places where our equipment was rushed into service. It makes us, in this local, feel proud that we were able to do our share in helping to alleviate the distress caused by the flood. To further help the distressed, a collection was taken at the plant and the sum of \$2,225.00 was donated. \$1,000 was donated by the company and the rest by the employes and members of Local 1590 and Local 1589 which is our sister local.

BERT THORNLEY, P. S.

Local 1631 Elects Delegates to Convention

L. U. 1631, HARMON-ON-HUDSON, N. Y.—At the meeting of June 7th, 1950, elections for delegates to the International Convention to be held at Miami, Florida, the week of October 16th, were held by this local union. The following Brothers were elected to represent this railroad local as delegates: Brother A. D. Ciano, president, Brother John J. Alterio, financial secretary; elected as alternates were Brother Daniel Regan, former president of Local

Union No. 817 and also recently appointed International organizer and Brother Elwood Mittenzwei, chairman of the Executive Board of this local.

The members of this local feel that we will be ably represented at the International Convention.

In reading over the July issue of the JOURNAL the writer reads with interest news from the fellow press secretaries under the caption of "Local Lines." Generally the writer reads first of all railroad news, and the article which impressed me most was that from Brother W. L. "Woody" Ingram of Local Union No. 205, Detroit, Michigan. Believe me, Brother Ingram, your program sure does hit the jackpot but it is so hard to try and get a fellow Brother to realize the same, especially when all is going so smoothly at present. We just cannot seem to get the average Brother to look into the so-near future. Thanks again, Brother Ingram for your fine article and program.

This local union expects to have another write up ready for the convention number so until then let us say au revoir.

D. H. VAN HOUTEN, P. S.

Electronic Computer on View

(Continued from page 38) large and fast. The memory has a storage capacity of 512 words achieved by using 64 acoustic delay lines, each of which provides storage for 8 words. The average time required for SEAC to refer to a word in its memory is 168 millionths of a second. In these acoustic lines, electrical impulses, which are sent in at one end, generate a sound wave which travels down the mercury column and is transformed into an electrical signal at the other end. An electronic method of shaping and amplifying this signal is used to start the wave on another cycle, at its original strength. The machine can remember instructions and numbers by repeating this process as long as necessary.

SEAC's Speed

As an example of SEAC's speed, it was directed to compute the factors of any given number up to 100 billion. Here the problem, of interest to pure mathematicians, is to find, for each number, what whole numbers will divide evenly into it beside itself and the number 1. One of the numbers fed into the machine was 99,999,999,977. The machine determined that this number was not divisible by any number other than 1 and itself, making it a prime number. In order to arrive at this result, the machine divided 99,999,999,977 by 80,-

000 different trial divisor numbers, finishing the problem in 30 minutes. A man working with a desk calculator, 8 hours per day, would take about two months to do this same problem.

SEAC's Binary Nature

SEAC is a binary machine, which means that it uses only two digits—"0" and "1"—to represent all numbers and instructions. Conversions from the decimal systems, in which the problems are coded, is done automatically by the machine. The binary system was chosen because it is a simple and rapid system and because it is particularly suited for electronic machines. The presence of a pulse is used to indicate "1" and the absence of a pulse is used to indicate "0".

SEAC's Size and Components

In spite of its high speed, large capacity, and versatility in problemsolving, SEAC is relatively simple to operate and compact in size. These features were among the objectives of the analysis and design stage preceding actual construction.

SEAC is housed in two consoles: one containing the acoustic memory, the other containing the rest of the computer (including an additional memory, for future use, which consists of cathode ray tubes). The memory cabinet is 60 inches in width, 31 inches in depth, and 84 inches in height. The computer proper is housed in a cabinet 180 inches long, 60 inches in depth, and 96 inches in height; and contains 18 relay racks, on which the components are mounted, each 19 inches in width and 72 inches in height.

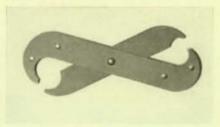
The principal components of the memory are the acoustic delay lines and the associated electronic equipment. There are 64 acoustic delay lines, each consisting primarily of a glass tube filled with mercury. The associated electronic equipment consists of 380 vacuum tubes, used largely for reshaping and amplifying the pulses in the delay lines and for energizing the switches in the system. These switches are germanium diodes; there are 3,500 of them.

The equipment in the computer proper, as distinct from the acoustic memory, is typically electronic in nature. The principal elements are germanium diodes and vacuum tubes. There are 9,300 germanium diodes here and 495 tubes. Some idea of the complexity of the circuits is suggested by the fact that there are 100,000 soldered connections.

The large number of components and the intricacy of their inter-relationships creates a major problem in the reliability of operation of a computer. Here vacuum tubes are usually a primary source of difficulty. In SEAC, the number of vacuum tubes is relatively small—a total of 875, in contrast to the 18,000 tubes in ENIAC. These tubes, moreover, are used only for amplification of signals and as a source of energy: they are not used as part of the computing components proper.

New Type Fuse Puller Developed by Member

A new type fuse puller, devised by an I.B.E.W. member, is said to make removing fuses easy. The puller can remove fuses from one-half to one inch in diameter and is especially useful in spots where the ordinary puller cannot work because of tightness of the clips in the porcelain block.



The product was developed by Brother Archie Baker of Pawtucket, R. I., a member of Local Union 1327. Trade name of the puller is "Roll," and the maker claims it actually rolls out fuses from porcelain or slate blocks.



Illogical Female

Little George's evening was ending up in the usual manner. His mother had ordered him to bed, he had demanded to know why he had to retire so early, and she had told him. Following the usual

pattern he had turned to his father. "Pop," he complained, "women sure

are unreasonable!"

Papa watched Mamma out of the corner of his eye, and timidly inquired:

"Why, son?"
"Well," explained the thoughtful youngster, "tonight Mom says, 'George, you are too young to stay up.' Know what she'll say in the morning, Pop? She'll say, 'Get up, George-you're too big to stay in bed!' You can't win,

Plain Truth

Mrs. Green-"My husband is the most gentle, patient, easy-going, good-tempered man you could imagine."
Mrs. Black—"Yes, my husband is lazy,

Turn for the Worse

Patient: "I'm in love with you. I don't want to get well."

Nurse: "Don't worry, my boy; you won't. The doctor saw you kissing me, and he's my husband." . .

Minority Party

We hear of an old down-state Missourian, now in his nineties. Someone was taken to call on him, and remarked: "Well, you certainly have seen many changes in your life."
"Yes." he replied, "and I've been agin them all."

Only Once

Bill-"So that old chap hasn't been out of this town but once since he was born?"

Bank—"Yes, when he was 10 he ran away to sea, and didn't come back till he was 60!"

Very Risky

The old soldier had been recounting hair-raising tales, and finished up by

"Many a time in many places abroad I have faced the enemy unflinchingly, but what is life without risks?"

"You are right," replied the timid little man who had been listening to the tales of the brave before him. "Many times when the weather forecast was doubtful I have ventured out without my raincoat."

Smart Lad

Prospective Employer: "Do you think yon know enough to be useful in this office?"

Boy: "Know enough? Why, I left my last place because the boss said I knew too much."

We Agree

Next to a stuck zipper, the bulldog hangs on with the greatest tenacity.

He Should Be

"Hello," said the neighbor, "back from your shooting? Have any luck?"

"Rather," said Jones proudly. "I got 12 ducks."

His neighbor nodded approvingly. "Were they wild?" he asked.

Jones looked thoughtful. "I can't say they were, exactly," he replied. "But the farmer who owned them certainly was.'

This Is a New One!

Flapper-"Don't you speak to him any more?

Ditto-"No! Whenever I pass him I give him the geological survey."

"Geological survey?"

"Yes, that's what is commonly known as the stony stare." . . .

His Handicap

"Those new people across the road seem very devoted," said Mrs. Jones to the very devoted," said Mrs. Jones to the newspaper which hid her husband. A rustle of the sheet was all the reply she got, but she was used to that.

"Every time he goes out he kisses her, and goes on throwing kisses all down the road. Edward, why don't you do that?"

"Me?" snorted the man behind the newspaper. "I don't know her!"

The Mechanical Age

Lonely baby chick taking a look around the electric incubator of unhatched eggs: "Well, it looks as if I'll be an only child. Mother's blown a fuse!"

Bum Shot

Drugstore Clerk: "Did you kill any moths with those mothballs I sold you the other day?"

Customer: "No, I tried for five hours, but I couldn't hit one.

Discerning Youngster

"Come, come, Joan; surely you know if the world is round or square? . . . Mary, tell her."

"It's crooked, teacher," said Mary, darkly.

Wasting The Best

A man went to the bar and ordered a Martini, drank it, chewed up the bowl of the glass, and threw the stem over his shoulder. He continued this for about six Martini's and noticed the bartender was staring at him.

"I guess you think I'm crazy, don't you?" he asked.

"I sure do," the bartender replied, "the stems are the best part."

Discovering Electricity

The following brief story on Benjamin Franklin was handed in by a little girl: "He was born in Boston, traveled to Philadelphia, met a lady on the street, she laughed at him, he married her and discovered electricity."

American Wild Life

The two Irishmen had landed in America, and taken a room in a seaside hotel. To their surprise, they were attacked by mosquitoes, an insect new to them.

They turned out the light and crawled under the sheets. Larry peeped out, just as a firefly flitted in through the window.
"It's no use, Mickey!" he groaned;

"they've come back wid lanterns looking for us!"

Economical

"Pop, if I save you a dollar would you give me 50 cents of it?

"Yes, I guess so, son,"

"Well, I saved it for you. You told me you would give me a dollar if I passed in arithmetic and I didn't pass."

Just In Case

"Sorry to put you to the trouble of fetching water specially for me," said an English tourist who had ordered whisky in a Highland inn.

"Nae trouble at all," replied the host, "I always keep a drop on the premises in case of fire."



"On second thought, I will go to the convention with you,"

Spokane Story

(Continued from page 30)

year. It became necessary, if the program was to be a success, to work out a plan whereby the isolated apprentices could receive the same training which could be afforded the apprentices in the metropolitan area.

To do this, the union and management enlisted the aid of the Spokane Trade School, which developed a program whereby all the apprentices would meet one Saturday each month for six hours. During that period they would receive the related classroom work for that period. The instructors had prepared four lesson sheets, which were taken home with them by the apprentices. The students would complete and mail in one lesson sheet each week. This system enabled the instructors to grade the papers and correct them prior to the next monthly Saturday meeting. They were then prepared to discuss, with the apprentices, the difficulties which they may have had with the work covered in the lesson sheets.

The first year of the related training covered elementary electricity and the textbook used was "Industrial Electricity" by Nadon and Gelmine. The instructors at the trade school, with the assistance of the Apprenticeship Committee, prepared the lessons for the training.

This year classes will probably begin early in September. The second year work for the apprentice linemen and the apprentice electric mechanics will be carried on with half the time being spent in the classroom and the other half in the shops for the mechanics and on a practical training area for the linemen. The text which will be used for the linemen will be "Linemen's Handbook" by Kurtz. The mechanics will use the same text as last year, with advanced work in the theory of electricity being covered through the year's training.

The company pays the transportation costs for the students as they attend classes each month and, in addition, pays for one meal in the eases of those men attending from out of town.

The instructors are paid by the Spokane public school system, cooperating with the Federal Apprentice Training Service.

The entire operation of the apprentiee training program is under the supervision and control of the joint union-management Apprentice Training Committee. This committee must approve before an apprentice may take his examination for journeyman status. The committee consists of a journeyman lineman, substation mechanic, meter tester and three management representatives. Members of the committee are John Pitcher, Oscar Ranzenbach, Harold Carver, Paul Hopkins and Len Stirn, Glen George, the sixth member is chairman of the committee.

Both the union and management are well pleased with the results which have become apparent through the training program.

Whatabout V.D.

(Continued from page 36)

infected persons by having sex relations or other close contact with them. But a baby can catch syphilis before it is born if its mother has the disease. Untreated syphilis of pregnant women can cause miscarriages, dead babies, or crippled. sickly, or insane children. Dead or diseased babies are born to five of every six pregnant women who have syphilis and fail to take treatment. Most states seeking to prevent syphilis in unborn children require physicians to take tests of pregnant women. If the test shows syphilis present and treatments are started immediately, the baby has an excellent chance to be born alive and healthy. Again only about two weeks of treatment is necessary-a small price to pay for a whole, healthy baby, plus the cure for the mother.

While many of our Journal readers may never have need for any of the information and advice contained in this latest of our health articles, either for themselves or their families, they may have occasion to help someone else—some young person who has fall-

en into bad company or taken the wrong kind of fling at life. They may be able to make others see how dangerous are syphilis and gonorrhea and how sensible, sure and painless the present-day cures for VD are.

Here are the facts to remember and to tell others.

- (1) Syphilis and gonorrhea are not caught from toilet seats, drinking fountains, easual contacts, but are spread by sexual relations and of course the ideal way of avoiding their crippling effects is by avoiding their cause—not becoming exposed to them.
- (2) Once exposed, however, syphilis and gonorrhea may be contracted and their first signs may go away without treatment, but this does not mean the disease is at an end.
- (3) Patent medicines and quack doctors never cure syphilis and gonorrhea. Self-treatment is never effective and may be dangerous.
- (4) New drugs being used for the treatment of venereal diseases can cure early syphilis in approximately 10 days and early gonorrhea in a few hours. Encourage anyone who may have been exposed to see his family doctor or go to a public health clinic at once.

Coxey's Army

(Continued from page 22)

est-bearing, non-taxable bonds, sells them to these corporations and borrows its own money, and our Government taxes our people to pay interest to these corporations for the use of the people's own money."

One of Coxey's most devoted admirers was a man named Chesterfield W. Myers, the poet of the Commonweal. One of his poems: Will it be thus in Heaven, mama, When we reach that glorious place, Will the poor be clothed in tatters and rags,

And the rich in silks and lace?
Will the rich folks live in splendid homes.

While the poor repose on pallets of straw,

And shall we often go hungry to bed—

Will it be thus, mama?

Mitchell Dead

(Continued from page 18)

Bengough of the Trades and Labor Congress of Canada said:

"The position of Minister of Labor is the most exacting post in the Government. The problems of the Department are unique. They touch so intimately the lives of so many millions of people that they acquire an importance in their economic and social influences far greater than that of any other Department.

"Humphrey Mitchell measured up and more to these great responsibilities. His passing is a great loss to us all.

"There were times when we disagreed with him, but those were differences over government policies. Humphrey Mitchell never forgot his trade union background and the needs of working people."

A state funeral was held on August 4, followed by services at St. Barnabas Anglican Church. Burial was in Beechwood Cemetery in suburban Ottawa.

Brother Mitchell is survived by his wife, the former Violet Webb, and two sons, Humphrey and John.

Our Auxiliaries

(Continued from page 29)

know, we have had plenty of rain the past two months.

The last year was a successful one and we want to thank all officers and members for their work and efforts to make it so. It requires time and work to carry on, as we are not large in number, considering the size of Local 26. But we are doing fine work and are able to help some who are in need. We are looking forward to admitting new members in the fall at our September meeting on Tuesday, the 26th, so come and join us.

Auxiliary 26 sends greetings and best wishes to all sister auxiliaries.

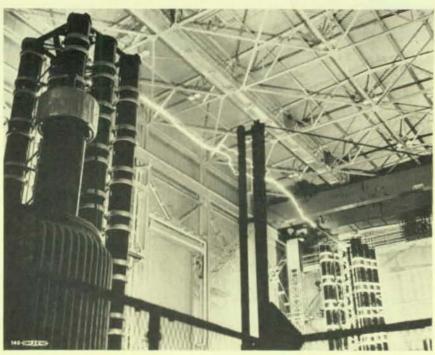
LAURA JOHNSTON, P.S.

L. U. 569, San Diego, Calif.

The Ladies' Auxiliary to Electricians 569 met at the home of Mrs. Gwen Robbins on Thursday, July 13, for a potluck luncheon. Mrs. Lillian Mohr was the co-hostess. Canasta was played in the afternoon.

Members of our auxiliary were guests at a meeting of the Southern

15 Million Volts on Move



Ripping through the air like a spear of fire, a 15,000,000-volt bolt of lightning, the most powerful ever created by man, leaps 50 feet between two impulse generators at General Electric's high voltage engineering laboratory, Pittsfield, Mass. Held in June, the demonstrations also showed the effect of lightning on power transmission lines; on a golfer, using a clothiers dummy as a model; and upon a model city with bolts of lightning striking the small buildings and putting out the lights when proper protection was not available.

California Joint Conference of Electrical Workers' Auxiliaries on Saturday, July 15. We enjoyed the program very much. Our auxiliary plans to affiliate with this group.

The auxiliary is starting a project for making articles for the Cerebral Palsy Foundation in San Diego. Our first meeting for this purpose will be at the home of Mrs. Mary Grover on Friday, July 28.

The regular business meeting was held Tuesday, July 25, at 8 p.m. The nominating committee was elected and they will present the slate of new officers at our August business meeting. The entertainment hostesses arranged a union label quiz, with prizes for those able to identify the union labels. Cake and coffee were served by the refreshment hostesses.

JEANETTE MCCANN, P.S.

Lightweight Aircraft Energizer Is Announced

A new lightweight ground power supply suitable for medium requirements of low-voltage d-c power for aircraft, airports, and aircraft testing stations, has been announced.

Supplementing the popular 500-amp

G-E energizer, this new 265-amp, 7.5-kw unit was developed to meet the demand for a smaller, lightweight set for general purpose use. High over-load of 500 amps for one minute, and dual range of regulated voltage at both 14 and 28.5 volts provides a wide range of application to aircraft equipment. The compact package provides a regulated power supply for all types of aircraft testing and maintenance work, for cranking small reciprocating aircraft engines, for radio and radar testing, charging batteries for airplane engines, and similar aircraft jobs.



Low voltage range of the energizer is 13-17 volts, while high voltage range is 28-35 volts. Voltage regulation is plus or minus 2½ per cent over the entire range.



LOCAL UNION OFFICIAL RECEIPTS

March 25, 1950, to June 24, 1950, Inclusive

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601- 960227 13511	960266 13532	640—BA 101019 351431	351434	B 303144 B 455976	458091	H 327548 H 397918	327591 397919	780 994066 68548	994247 68563	BA 278421 740300	278734 740301	872- 70661 821251	70705 821403
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504751 B 727745 771751	565500 727757	643- B 454836 51348	454842 51652	692— AN2047 BAN221	582996 335600	740 B 409287	409330 102372	782 B 74501 121348	74517 121351	823 490882 397202	491354 397256	876 BARRONB ARRONB	705NB 844NB
B 977751 603—BA 65464	771847 978083 65475	198310 249987	108472 249907	693— 345306 579189	348411	741 813324 742 H 72374	513391 72378	240213 B-328788	328800	824 11401 BA 131776	11406 131798	BA 5229 125161	5254 125165
BA 119817 353409	120000	644 521.251 155184 735751	521263 155250 736085	680586 904082 880582	680642 904085	743 - B 131292	338188	783— 170018		825— 15 579407	332463 579466	877— 418431 878— 437836	418480 437866
BA 390001 604 B 10051	390495	972066	972075	695 455B	880600 908B	744—BA 29	922189	357805 B 365401	357939 365551	826 B 01395 B 449251	91500 449450	879 - 275825	765816 275819
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629 54836 357270	54837 357628	676 242756 939	243000 941	707148	707151	BA 381349 401435	381396 401748		509303 40294	845 818251 439426	818530 439451	51504 61236	51825
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630— 90782 373578	373722	677— 839773 314580	840000 314700	B 999056 727— B 472901	332670 472923	128501 492886	128618 492892	610.348	581202 610500	810001 958624	810263 958640	907— B 256466 258888	256553
631— BA 76850 BA 94137	76852 94164	500551 722412	500507 722418	382248 731010	582209	771—BA 376071 772— 029251	377025 629505	813— B 10723 86767	39945 87000	B 04803 B 97528	64807 97533	438201 538601	438202 538720
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210122 992246	210126 992250	679 - B 22286	282200	510751	516774 319953	773— 217332 867001 802411	217500 867177 892419	B 743001 000486	17540s 743030 960084	864 754501 15463 66323	754526 66500	BA 397848 814857 910 — 130328	397967 815055 £30330
633— 36819 78831	36835 79200	680 172201 488911	172245 488972	731 349887 959011	350000 959250	774 B 20455	20513	815— H 980843 184610	981000	100001 B 102244	100001	588963	589922 286397
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1960	912 - B 223905		962-(Cor	nt.)		993- 132653		1041-B 27751	20250	1084-B 21001		1137-B 304613		1190 — 330007	
14 16 16 16 16 16 16 16	506392	566404	B 9	67484	967492	B 778419	778431	B 58501	58720	B 441378	441500	500856	500870	B 964083	964092
14	913- B 417203	417205	B5	34985	534992	994 BA 237333	237485	1042-BA122674	122700	106100	106272	428349	428460	BA:310357	310768
1. 1. 1. 1. 1. 1. 1. 1.	867359	867401	964— 965— B	19654 57521	19731	714001 882351	714366	442613	442751	BA 407148	407264	1139- 121914	122022	1193- 609947 640977	
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140 140	B 429724	429728		93690	93702	151836	151808	1045 - 105375		B 958361	958099	1143 BA 195025	195750	BA 402001	402940
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Part	917 126001	126160	1	95348 16991	95372	999 B 322835 B 827251	323000 827291	B 914958 B 998751	915000 998847	1094-B 2456	2457	B 407768	407837 91808	BA 511501 1197— B 500670	512471 500675
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Part	919 200934		B 1	60181	160285	B 841211	841250	608270		1097— 152897 1098—BA 82559	152960	353737	353743	1199- 676318	676360
Part	BA 365752 482694		B 1	62695	162750	1001 - B 627437	627500	1048-B ICC	4000CC	1099 14260	14261	1147- 840S	8417	1200- 114636	114688
1968	817702	817700	2.2	23624 1 23924 1	223658 223958	1002- 41455	903555 41456	BA 18C	4500EC 2008	1100— 271456	271475	BA 685501 709501	709638	1201—B 91230	382606
242	870757	870792	21	98201	297943	B 443391	443609	B 67311	68250	B 414788 683865		1148 300085	310000	1202-B 270096	
1909 1979	923- 256716 584543	257100 584546	34	30901 3		1003 - 115481	115500	B 01751	92250	B 455795		1149 57751	57830	1203 - B 7552	
Part	925 - 307982	307984	33	32102 40991 3	347033	1004—B 100	804005	1049—BA 1BC	858750	1102-B 131756	131773	1150 - B 589351	589390	1204 505031 646228	505251
1969 1969	B 555557	555657	B 30	61705 :	361004	B 1EC	SOOEC	BA 1DC	2000DC	1103-BA 20714	20729	1152- 3867	3921	1205- 79779	79795
1972	926—BA 377314		B 3	84363 3	384403	B 63571	63600	BA 42976	43103	1104 — B 586748 B 593001	586971	B 52501	52515	1206- 220246	
19.20	BA 648001	648083	B 3	85256	385390	1005 B 129454	129514	BA 174027	174250	B 594237 B 832251	833000	1153-B 135417	135454	511651	511708
1906 1907	927— B 83667	83680	B 38 B 68	85923 3 89039 6	385979 689182	B 834746 B 972501	830000 972971	772042 994692	772050 994903	B 834297	834500	1155—B 10730	606831 10769	1208—B 36751	36054
14000 1400	928- 104022	164028	70	63160 7	763164	B 317875	318274	121629	121634	1105 - 582767	582837	B 603403	TATAL MARKAGE PARK	B 592125	592250
1941 1940	930- 340008 B 427850	349108 428000	B 70	66641 7 67948 7	766654 767954	BA 141118 343923	141535 343958	1051—B 128229 B 239746	128232 240911	B 102539 B 373201	102750 373220	B 762955	702957	B 849179 907501	849182
1.64.100 1.64.100	856501	856534	B 7	73255 7 73554 7	773347 773624	BA ICC	200BC 200CC	1052—BA 02865 162289	62874 162306	950278	950283	B 841225	841255	1209 628785 678753	
1.	931 154185	154443	966	05917	66000	BA 1EC	200EC	1053 - B 220667	220670	62685		735843 1158—BA 10333	735847	628484	628486
Selection Sele	932- 657923	657925 50334	B 4	37803 4	437807	101319	101548	887119	887238	1109-B 115937	115979	BA 197772		629090	
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555 16 16 17 17 18 18 18 18 18 18	268333	268352	B 7 B 98	39044 81886		B 220306 399122	220310 399213	1057- 497900	497964	B 925550	925022	B 542320	544250	1215- 314808	314870
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19. 1. 1. 1. 1. 1. 1. 1.	935 B 847106 320953	847107 320954	970- 60	03976 (609000	B 87751	88500	1059 80552	80574	230101	230124	BA 699001	699245	1217 633029 480019	
Time	937 81193	81311	971 BA 1	93724	93729	B 863015	863750	1060 - B 169168 B 404625	169713 464657	520951 BA 678001	520971	333713	333771	179701	
18 18 18 18 18 18 18 18	938 - 178611	178641	-45	90978	199995	B 950070	950121	B IDC	1200DC	1114-B 73888	73896	B 909515 1162—B 885185	909868 885193	500362	600500
942— ELSING GOTTO 943— BASING GOTTO 944— BASING GOTTO 945— BASING GOTTO 945— BASING GOTTO 945— BASING GOTTO 945— BASING GOTTO 946— BASING	939 B 860773	8700T1 371405	B 5	77701 84944	84973	327535	327559	B 28878	29250	1116-B 751	1034	1163-B 536460	536991	1220- 170110	170115
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BA 140381 1299 — 989309	140750 989355	1352—BA 6122 49801	6195 49802	1398 — B 336001 B 732108	336118 732111	479558 B 099858	479576 999890	40243 B 871204 1499—BA 41701	49312 871208 41794	1560—B 74860 B 162867	56644 163008	HA 650251 BA 650251 1640 229801	50261 659575 229817
1300 — 294367 723893 1301 — B 140381	723813 723813 140428	484006 558803 1353—B 91039	484176 550966	B 755971 1399—BA 13022 BA 266000	750000 13047	1450—B 100 B 100	400CC 400DC	BA 380563 B 442242	380700 442244	1562—B 47159	492107	1645—BA 51001 BA 722251	51051 722269
143147 B 154041	154500	B 525451	91041 303300 525458	BA 206000 BA 457037 BA 711751	200044 403750 712167	B 1EC B 68261 B 966492	400EC 68273 966501	1500 -B 10C	581001 1700CC	B 76878 B 127724	76885 127727	MISSING	
198893 317401	198900 317415	B 726867 788008	737180 788197	BA 131630	4377 133703	1451—B 696724 858738	858778	B 1DC B 1EC B 2155	1700DC 1534EC 2400	1563—BA116741 1564— 215413	139296 116740 215416	3— 62400 11— 65251—	- 65257
B 329461	049470	1354— B 522703	622902	218841	218843	B 950001	959123	B 71701	71749	503550	503592		-065575

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Minding 14—(Cont.)	Missing 1203— 375001—375098	Previously Listed Missing—Received	Blanks 1377—	11—(Cont.) B 615551—	46 (Cont.)	77—(Cont.)
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47— 24008 51— 81146— 81170	1238—BA 67624 1242—	16407— 16408 16410— 16411	B 424CC—425CC B 428CC—600CC	615588 B 619845	.065725	565823 365388 365588
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803— 804 807— 808	1393— 274915 1405—BA389359	B 25820 25848 25876	517WC-544WC 546WC-550WC	743789	743909 36638 743909 703121	- 30658 416078 416598 416928
BA 49506— 49509	1415—BA 6337— 6340 1427—BA 11862— 11863	1228— 617357 949020—949031		B 743911	744410 50 383507 744410 50 630485	614393 118576 118580 630756 118630
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1152 B 428522 428524 1179 14102 14108	16381 16400 16401	1361— BA 338WC—350WC	592071—592072 592103		565395 356838 565528 357268	341359 341497

Vold			Void		Vold		Void			Vold		Vold			Vold		
125-(C	ont.) 341596 341796	26年1月2日日	153—BA 400603 742792	742815	571418	571564	369—(Co	130300	129337	453-(Cont.) 690000	101000	568—(Co BA	nt/) 115601		707	567117 229198	567143 229200
	341832	341797 341842 341920	742991 159— 589502 160—BA 34294	743045 34314	271— 836265 114653 B 373500	830485		139409	139396 139419 139496	690129 690193 690300	690159 690298 690301	569 BA	3141	3361	716	502567	-502657
130	564387 564387	564384 564628	BA 246630 247480	247282 310379	276— B 665999 170797	and the second	1	139509 139560 —	139561	690303 690381	690370	- 1	598919 598993 599204	598921 599189 599425		502787 980552 980614	840002 980587 980651
139		395012 395021	332024 332172 932257	332030 332236 332417	284 705784 705832 286 B 120	705799 705841 169	Et (014049 914063	600388- 600396 600460	090398 090398	17	599461 599469 599033	599522		980708 980774	980765 980914
	395028 395045	395029 395108	332430 332499	332464	289— 8216 BA 77158 BA 170783		370-	22536 55804	158800	454 959085 455 54959		- 2	199989 100274	500032 600450		980936 981279 981500	980977 981426 981531
	305192	395146 395250 395643	333019 333025	332998 333021 333193	BA 170783 170854 291— 43288	170822 43291	371—BA	158809 22WC	ASWC 406WC	BA 75613 B 324350 456— 632345	639319	570-	115866			981539 981746	981657 981747
	395684	395686	333038 333797	333764 333362	292- 43457 72000	59037 303590	46	08WC	466WC	457— 785282 458 621478	632413	574-RA	1500 1500 856335	856108 8563127		981932 982018 982147	982008 982111 982162
	395807	395802 395837 395878	BA 632261 163— 667120	334124 632320	303688 304139 B 423218	303854 304829 423401	71	96WC :	664WC 814WC 892WC	460 - 561911 462 - B 56346	502116 602035		57083 57150 174492	857131		982172 982241	982176 982284
	395996	395959 395999	175 007242- 172834	-667250 219256	294 377842 300 660025	660352	9	SAWC S	926WC	465— 198916 258032	258016 258060	576— 577—	97333 110430	310448		982313 982351 982408	982326 982400 982439
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	396228	206225 306263	183— 21056 22003	21980 22015	302- 755612 755675	755743 755743	133	AWC L	346WC 405WC	258306 258836	258274 258643 258866	583— 586—	97676 97676 93286	282007		982964 983417 983495	983310 983441 983500
	396434	396411 396442 396471	142323 142445 142464	142395 142462	755825 755925 B 843270	755867	13476	2WC 1	494WC 552WC	258927 512895 512942	512843 512932 512952	587— 593—	18005 72834 60257			983538 983575 984076	983555 983948
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B 161880 331261 966— B 470953 470962	B 61647 61648 B 574833	285080 285084 285093—285096	1298—BA140434 1299— 989310	10	1427— 266625 687888	BA 371369 371388 371394	1201 — B 91229 1274 — B 905317
470983 B 471065 471074	B 899156 899212 899502 899750	285100 285163 285415 285422	1300 — 294395 1301 — B 140401		BA 154NC 161NC 226NC 544NC	BA 461256 BA 462026	1353— 788093 1425—B 40110
971— 135330 499990 976— 192232 992275	899888 B 900428 900429	1170 285445	B 154434 154473 15	54481	655NC 800NC 1031NC 1146NC	462058 462106 462123 462133	1459— 343801—343802 1473— 526514 526565
977— B 29CC 33CC 71CC 91CC	1052— 129063 1064—	BA 57932 308509 393643, 393646	1302— 112277 1314— B 915531 91	15540	1209NC 1414NC 1578NC 1592NC	1558—B 81012 B 552261	1500—B 2109— 2110 2113
115CC 136CC B 70DC 157DC	BA 534581 BA 535083 535105	393650 393653 1177—B 72757— 72758	915594 91	15672	1842NC	1560—B 162978 492091—492092	B 882798 882800 1556—B 972389
170DC B SEC 77EC	535118 535535 535604 535651	1186 700741 1191	1315 B 965189		BA 30279 BA 473064 1436 — 384033	1562—B 41188 139294 1568—BA 217847 217851	
980—BA 447030	1056— 691761 601772 1058—	BA 310691 310744 393248—393250	1319-478809-47	78810 78963	1437—B 399941 1439—	217854 217800 BA 408619 408634	Previously Listed Void—Not Void
BA 500920 500995	BA 442937 1070— 684345	1193— 646997 1199— 676342	479037 479184—47	79185	BA 45770 BA 149255 BA 176649 176656	408638 408650 408670 408679	650 56242 56246
981— B 589669 854654 BA 291EC—300EC	1072— 66743 1073—	1201 — B 553077 1202 — 270296	479476 1320— B 628860		B 463029 1444—BA 169797	408090 408722 408730	1159—B 47008 56254
A SOCIETION - DECEMBER		Carolina Car	Section of the sectio				

Production Tops 300 Billion KW

Production of energy by electric utilities during the year ending May 31 passed the 300 billion kilowatt-hour mark for the first time in any 12-month period, according to the Federal Power Commission. The figure of 301,340,014,000 kilowatt-hours was 4.6 per cent above production for the previous year.

Reports received by the commission indicate that there was a net increase of 328,306 kilowatts in the installed capacity of generating plants in utility service during May. As of May 31 this year, the total installed capacity of utility plants was 64,890,648 kilowatts.

NLRB Results

On July 26, 1950 a union shop election was conducted at the plant of the Teleradio Engineering Corporation, Wilkes Barre, Pennsylvania, employes of which are members of L.U. 1634. The Official tally of results showed 209 "YES" and seven "NO."

Certifications

WNEW, Inc., New York, N. Y. Certified (radio technicians): Local Union 1212, which received 9 votes; 7 votes were cast for ACA, CIO.

New French Plant

French electricity output will be boosted by a new Marshall Plan financed power plant now nearing completion at Passy-sur-Arve in the French Alps. The project, on which the equivalent of \$7,000,000 in counterpart funds is being spent, provides jobs for about 1000 French workers. In addition Marshall Plan dollars are being used for the purchase of American machinery and construction equipment, such as mine cars, drills, compressors, and dynamite fuses. Passy-sur-Avre is one of 58 hydro-electric projects underway in France.

Death Claims for July 1950

L.U.		Name	Amount	L.U.	Name	Amount
L 0.	(I)	Robert B. Miller \$ Peter F. Arthur Ambrose V. Kelly George B. Høfmann	1,000,00	90	Levi L. Langerin \$ Claude LeRoy Benton John Ray, Sr Daniel J. Bernacchi	1,000,00
1. 0.	(23)	Peter F. Arthur	1,000,00	121	Claude LeRoy Benton	1,000.00
L 0.	(3)	Consens B Harmann	1,000,00	134	John Ray, Sr.	1,000.00
I. 0.	(2)	Joseph Gilchrist	1,000,00	134	Edward J. Blondin	1,000,00
1.0.		Walter O. Schmidt	1,000.00	134	Edward J. Blondin	1,000.00
1. 0.	V 20 %	Totale Amilianous Carriello	825.00	134	Herbert W. Canning	1,000,00
1, 0,	(0)	Dennis J. Lamb Regnal L. Hall Albert B. Handysides Louis A. Wiechman Milan H. Seymour William C. Grefrath	1,000.00	134	Richard O. Fugmann	1,000.00
	(11) (17)	Albert D. Hall	1,000.00	134	Fred Hartwig	1,000.00
I. O.	(20)	Louis A. Wiechman	1,000,00	134	Fred Hartwig Bernard Luby Sidney Philippy John E. Rooney	1,000,00
1. 0.	(1181)	Milan II, Seymour	1,000,00	134	John E. Rooney	1,000.00
1. 0.	(40)	William C. Grefrath	1,000.00	184	CHATCHINE AL SCHOOL AVERAGE	1,000.00
	6,8313	Walter G. Burke	1,000.00	160		1,000,00
1. 0.	(102)	Harry H. Smith, Sr	1,000,00	175	Ernest G. Shiftett	1,000.00
	(117)	G. W. Hilton	1,000.00	185		1,000.00
	(130)	Charles H. Tschirn	1,000,00	231	Frank K. White	1,000.00
	(134)	G. W. Hilton	1,000.00	241	Frank K. White George Claude Bell Christ Landeau Frank H. Wills	1,000,00
	(134) (134)	AND THE PARTY OF T	1,000,00	245	Christ Landeau	1,000.00
	(134)	B. F. Fitzgerald Charles Jasper	1,000,00	271	Ernest C. Bowden	650,00
	(134)	William H. Talbot	1,000.00	389	George L. White, Sr.	1,000,00
	(140)	John G. Girard	1,000,00	291	George L. White, Sr James P. Gilmour	1,000.00
1. 0.		John G. Girard Oscar W. Buchanan	1,000,00	317	Warren Valentine Smith	825.00
1. 0.		Charles S. Foster	1,000.00	200	Lealle R. Johnson Edwin H. Tovey	1,000.00
I. 0.		George H. Jones	1,000.00	347 352	Roy L. Ritter	1,000,00
1. 0.		Perry Benge George E. Pedler George E. Brennan	1,000,00	353	Joseph E. Lasure	-150,000
1. 0.	(574)	George E. Brennan	1,000,00	300	Joseph F. Lasure	1,000.00
1. 0.		John G. DeHarde Gordon A. Kimball	1,000.00	37.5	Harold T. Auer	475,00
1. 0.		Gordon A. Kimball	1,000,00	393	George M. McCormick Wilfred J. Dumontet Stonewall J. Templeman	1,000.00
1. 0.	(1369)	Frank Burns	1,000.00	409 420	Stonewall I Templeman	1,000.00
2		John P. Elliott	150.00	440		1,000.00
3		Joseph Agnitsch	150.00	474	John T. Horns	300,00
2		Gregory Andrews	1,000,00	481	Charles A. Schelb	1,000,00
0.		Frank Burns James O. Welsher John P. Elliott Joseph Agnitsch Gregory Andrews Frank C. Bares Alois Chomas	1,000,00	494 569	John T. Horns Charles A. Schelb Harold G. Williams Herbert C. Johnson	1,000,00
5		James Feldheim	650.00	511	Joe Lee Liles Jr	650.00
1		Paul Hoffman	1,000.00	569	Joe Lee Liles, Jr. Benjamin H. Fisher	1,000.00
3		Herman Kravitz	825.00	57.4	John Henry Guest Frank J. Higgs	1,000.00
9		Joseph Oslenski	1,000,00	593	Frank J. Higgs	1,000.00
3		Adolph Porcell	1,000.00	595	Harry Edward Nelson	1,000.00
3		Ferdinand Schmitz	150.00	659	Francis D. Jobe Terrill John Payne Bernard Vincent Benetti Herbert August Pierson	650,00
4		Ferdinand Sehmitz Frank J. Thompson, Jr	1,000.00	664	Bernard Vincent Benetti	1,000,00
5		Robert L. Hamilton Edwin C. Morris	1,000.00	684	Herbert August Plerson	825,00
5		Edwin C. Morris	1,000,00	702		1,000,00
G G		Clyde A. Simcox	1,000,00	713	Rillie E. Renner Charles Kerr Corneallis A. LeFerre Thomas F. Callaghan	1,000,00
-6		Eugene Jarmiah Woods	1,000,00	710	Corneallus A. LeFerre	1,000,00
0.		Walter C. Bannow	1,000.00	7.4.4	Thomas F, Callaghan	1,000.00
9		John J. O'Brien	475.00	760	David R. Seymont	475.00
11		Walter C. Bannow John J. O'Brien Hermann E. Schinkel Albert Edward Swingle	1,000,00	768	George E. North	300.00
17		Harold Russell	1,000.00	775	Troy Blair	£,000,00
17		Harold Russell	1,000,00	794	Willie A. Siens Bichard F. Clark Patrick J. Sheridan Victor H. Henley Earl Bowers	475.00
31		Sciomon George Dion 1444444	1,000.00	7.00	Patrick J. Sheridan	650.00
85 40		HOREY IL KINGDOFF	1,000.00	800	Victor H. Henley	1,000.00
48		A. G. Heller Louis Lester Spears E. D. Aylesworth	1,000,00	870	Earl Bowers	1,000.00
51		E. D. Aylesworth	150,00	911	Darrick II D. Laller	1,000.00
51		William Henry Bradley Victor H. Jennings	1,000.00	531	Charles R Marshall	1,900.00
51 51		Victor II. Jennings	1,000,00	1002	James D. Coulter Patrick H. R. Lalley Charles B. Marshall Forrest B. Hogan	1,000,00
58		Robert H. Marine Edward W. Gore	050.00 150.00	1016	INSTITUTE 41 MINISTRALIA	1,000,00
58		Arthur T. Hawkinson	050,00	1049	Edward S. Hunstein Elmer Nerris Taylor Thomas Eswin Cocn	475,00
59		Frank D. Stevens	200.00	1049	Elmer Nerris Taylor	200,00
110		Walter D. Gillespie	1,000,00	1204	James T. Lucy	1,000,00
77		David E Assestante	1,000.00	1392	George J Simons	1,000,00
77		Arthur T. Hawkinson Frank D. Stesens Walter D. Gillespie William M. Roberts David E. Armstrong Harry E. Darling Roy Maddock Otin G. Freeman Joseph B. Manley	1,000.00	1393	George J. Simons Earl E. Bradway	1,000,00
77		Roy Maddock	1,000,00	1393	Eldon Charles Wolfe	1,000,00
80		Otis G. Freeman	1,000,00	20.00		
82		Joseph B. Manley	1,000.00	TOTAL		131,200,00

Power Industry to Meet Demand

A survey made by the New York Times indicates that the nation's light and power industry is in a good position to meet the demands caused by an accelerated war-production schedule. Since 1940 kilowatt capacity has increased by more than 40 per cent, with almost every region of the country showing heavy additions of new generating capacity.

The central manufacturing area of Western Pennsylvania, Ohio, Michigan, Illinois and part of Minnesota is making the greatest addition of new generating capacity. By 1953, this region will have added 4,500,000 kilowatts. Great demands for power are expected in Michigan, which was often termed the Arsenal of Democracy in World War II. That state's

leading utility, which serves 1,300 communities in a 2,400-square mile area, had a maximum sale of electricity to industry of 1,565,000,000 kilowatts in 1944. Today the rate, on an annual basis, is approaching 2,500,000,000 kilowatt hours.

The total effect of the expansion program in the power and light industry was an increase of 36 per cent in the kilowatt hour generation from 228,189,000,000 in 1944 to 310,500,000,000. Kilowatt capacity in the years 1944 to 1950 increased 40 per cent from 49,189,000 to 68,400,000. On the basis of current demand figures, the industry has a margin of more than 15 per cent in reserve capacity—a condition that has been improving since World War II.



Prayer for Our Deceased Brothers

Kind God and Father of all, once again we record in sorrow the names of our Brothers whom Thou hast called to their eternal rest. We are preparing to celebrate another Labor Day and we are sad because these workers cannot unite with us to pay tribute to the honest labor which Thou, Lord, blessed and called good. Our Father, Who art merciful and kind, Who loves the poor and those who earnestly toil, take these our Brothers to that bright country where they shall no longer labor but know rest and joy and peace forevermore.

Send Thy understanding and Thy comfort into the hearts of their dear ones left here on earth, O Lord, and let them know that death is only temporary and that they shall be reunited with their beloved dead in the far country which is paradise,

Help us too, Lord, to labor well in Thy vineyard, and to have kindliness in our hearts toward all men, so that we too may not dread death but look forward to it as the beginning of the happy life for which we were created. Amen.

Robert B. Miller, L. U. No. 1

Born June 13, 1877 Initiated February 23, 1904 Died June 25, 1950

George R. Steele, L. U. No. 1

Born May 23, 1875 Initiated June 22, 1897 Died July 10, 1950

James A. Fitzgerald, L. U. No. 9

Born April 4, 1879 Initiated June 10, 1919 Dicd June 2, 1950

Dennis P. Mackey, L. U. No. 9

Born March 3, 1890 Initiated April 28, 1928 Died June 2, 1950

Frank J. Weber, L. U. No. 9

Born January 28, 1881 Initiated May 21, 1912 Died May 16, 1950

Regnal L. Hall, L. U. No. 11

Born February 25, 1900 Initiated September 13, 193 Died June 25, 1950

Harold Russell, L. U. No. 17

Born September 27, 1899 Initiated August 1, 1922 Died June 26, 1950

A. F. Trudell, L. U. No. 17

Born June 3, 1885 Initiated November 22, 1906 Died July 7, 1950

Solomon G. Dion, L. U. No. 31

Born November 14, 1884 Initiated September 26, 1933 Died July 7, 1950

O. T. Holford, L. U. No. 40

Born July 18, 1898 Initiated July 27, 1944 Died June 15, 1950

Charles M. Wylie, L. U. No. 40

Reinitiated February 23, 1923 in L. U. 413 Died June 16, 1950

William H. Bradley, L. U. No. 51

Born April 21, 1894 Initiated April 20, 1937 in L.U. 702 Died July 10, 1950

Gene A. Cole, L. U. No. 66

Born August 24, 1924 Initiated November 21, 1946 Died May 16, 1950 Walter D. Gillespie, L. U. No. 66

Born August 27, 1896 Reinitiated July 2, 1941 in L.U. 156 Died June 27, 1950

Herbert G. Boehme, L. U. No. 86

Initiated February 11, 1896 in L.U. 44 Died June, 1950

Dale DeTrow, L. U. No. 245

Born September 29, 1893 Initiated September 20, 1934 Died July 14, 1950

Christ Landeau, L. U. No. 245

Born June 12, 1892 Initiated November 12, 1934 Died June 24, 1950

Ernest C. Bowden, L. U. No. 271

Born February 3, 1913 Reinitiated May 1, 1947 in L.U. 850 Died July 8, 1950

Elmer H. Fehr, L. U. No. 309

Born August 22, 1894 Initiated January 25, 1917 Died July 14, 1950

Leslie R. Johnson, L. U. No. 332

Born December 23, 1906 Initiated March 7, 1942 in L.U. 505 Died June 28, 1950

Earl L. Pierce, L. U. No. 332

Born April 13, 1882 Initiated June 15, 1943 Died July 15, 1950

Roy L. Ritter, L. U. No. 352

Born January 16, 1900 Initiated December 20, 1933 Died June 15, 1950

Robert J. Nolan, L. U. No. 683

Born December 8, 1893 Initiated November 18, 1937 Died May 25, 1950

Loyd O. Curry, L. U. No. 697

Born March 6, 1912 Initiated January 31, 1949 Died July 19, 1950

Billie E. Renner, L. U. No. 702

Born September 14, 1923 Initiated January 19, 1948 Died July 1, 1950 Charles Kerr, L. U. No. 713

Born August 14, 1884 Initiated May 6, 1913 Died July 2, 1950

Louis K. Meyer, L. U. No. 713

Born May 4, 1900 Initiated August 8, 1919 Died June 13, 1950

Casmer Piontek, L. U. No. 713

Born March 2, 1899 Initiated April 23, 1937 Died June, 1950

Joseph R. Sides, L. U. No. 734

Born January 29, 1889 Initiated January 16, 1918 Died May 31, 1950

Wesley Hicks, L. U. No. 763

Born March 17, 1921 Initiated December 4, 1946 Died July 17, 1950

Martin W. Nelson, L. U. No. 763

Born September 29, 1903 Initiated October 24, 1923 Died July 16, 1950

Charles Margaron, L. U. No. 1031

Born March 9, 1925 Initiated December 1, 1946 Died July 3, 1950

Opal Marzulto, L. U. No. 1031

Born October 22, 1897 Initiated November 5, 1942 Died July 4, 1950

Wesley Wenzel, L. U. No. 1245

Initiated December 1, 1942 Died June, 1950

Daniel L. Neusel, L. U. No. 1439

Born September 15, 1905 Initiated February 25, 1946 Died July 6, 1950

Jesse S. Everett, L. U. No. 1469

Born January 21, 1892 Initiated June 30, 1946 Died July 13, 1950

D. L. Lake, L. U. No. 1470

Born March 15, 1890 Initiated January 31, 1949 Died July 9, 1950



